DOCUMENT RESUME

ED 081 110   EA 005 395

TITLE	Project To Utilize Resources in Education.
INSTITUTION	Pennsylvania State Dept. of Education, Harrisburg. Bureau of Planning and Evaluation.
PUB DATE	69
NOTE	311p.; Reprinted in 1972
EDRS PRICE	MF-$0.65 HC-$13.16
DESCRIPTORS	*Curriculum Development; *Educational Resources; Elementary Schools; *Information Sources; *Instructional Programs; Junior High Schools; Middle Schools; Preschool Education; *Program Descriptions; Secondary Schools
IDENTIFIERS	*Pennsylvania

ABSTRACT

This publication contains approximately 275 brief abstracted descriptions of ongoing instructional programs in Pennsylvania public schools. Some of the program activities include art, basic skills, business, compensatory education, computers, developmental guidance, ecology, English, languages, guidance, humanities, industrial art, math, science, occupational guidance, special education, social adjustment, reading, and basic education. Also included are abstract descriptions of interdisciplinary and intercultural programs, individualized instruction, independent instruction, summer programs, parent participation, grouping for instructional purposes, and programs for able students. Each abstract lists a contact person who will provide additional information about the specific program on request. Abstracts are arranged in alphabetical order according to school district name and, within a district, by program title. An index/matrix lists abstract pages by descriptors -- subject areas or other topics -- that can be cross-referenced by grade level(s). (Author/DN)

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Project to
Utilize
Resources in
Education

EA 005 395

Bureau of Curriculum Development and Evaluation
Pennsylvania Department of Education

First Printing 1969
Reprint 1972

Commonwealth of Pennsylvania
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Department of Education
John C. Pittenger, Secretary

Office of Basic Education
Donald M. Carroll Jr., Commissioner
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Robert A. Bowser. Director

Pennsylvania Department of Education
Box 911
Harrisburg, Pa. 17126

INTRODUCTION

This publication is distributed to interested Pennsylvania educators in a continuing effort to disseminate information of educational activity in the Commonwealth. The PURE (Project to Utilize Resources in Education) catalog was originally financed by an ESEA Title V grant in 1967 and was revised in 1969. Because of the limited distribution of PURE, recipients are encouraged to share it with their colleagues.

On the succeeding pages are brief abstracts of on-going instructional programs in Commonwealth public schools. Inclusion of a program description in this publication does not infer that the Department of Education is rating it as one of the best of its kind in the Commonwealth, since no attempt has been made to evaluate the programs. The educator who is interested in developing a program similar to one in the catalog should evaluate the program while considering his own needs. The identified contact person has indicated receptively to inquiries concerning each respective program.

The abstracts are arranged in alphabetical order according to school district name and, within a district, by program title. The index/matrix then lists abstract pages by descriptors--subject areas or other topics--which can be cross-referenced by grade level(s).

FAMILY LIFE COURSE

The family life program was designed to meet some of the needs that our modern society has created. Since sex is becoming more "commercialized" every day, an effort is made to educate young people regarding this subject and to place it in proper perspective. The balanced course of study includes the meaning of life; biological, psychological and economic aspects of the individual and the family; family interaction; cultural changes in the family and training for parenthood and citizenship.

Attempts are made to make sex an inextricable part of the concepts of life, love and marriage. Social and moral implications are suggested but there is no preaching or moralizing. The ultimate goal, of course, is an educated person with a wholesome attitude toward sex. The intent is not to usurp the role of the home or the church but merely to support these agencies. Keeping the home well informed is a requisite to parental cooperation with the program.

In the elementary classes the material is taught by the regular classroom teacher. On the secondary level it is taught by the regular health, guidance or civics teacher respectively. Isolated lectures are discouraged, open discussion is encouraged.

The course of study was developed as a meaningful sequence. Material taught is that which is most important to the student at that period of development. It also serves as a foundation for later information. The primary grades discuss the home and family. The concept of life and its various forms is first introduced. The similarities and differences between pets and humans are explored. The intermediate level presents reproduction first in animals; later the analogy with humans is developed. Preparation for physical changes in adolescence is a goal at this level. The junior high school delves into the physiology of sex and adolescent changes in greater depth. Boy-girl relationships are outlined here. Students in the senior high school discuss personality development and their future. Child development and attitudes toward sex are undertaken at this level. Aspects of marriage and family life conclude the program.

Additional Information:
School district: Abington Heights School District
County: Lackawanna
Grades: 1-12
Pamphlet available upon request

Contact person: William G. McNulty
Psychologist
Abington Heights School District
Administration Building
Clarks Summit, Pa. 18411

HUMANITIES SEMINAR

Abington Heights' humanities seminar is a largely unstructured, student-oriented course which involves one or two large group meetings each week and three or four small group student discussion sessions, with each session limited to eight or ten students in number and a faculty mentor for each small group.

The course centers around the question, "What is man?" The course follows the line of pupil research and discussion along which this question leads the individuals in the class. Reading, field trips and other forms of investigation and research of this question are encouraged. Students are encouraged to posit the factors which they think make man a unique animal. Some typical premises explored are man, the worshipper; man, the aesthete; man, the philosopher; man, the creature of law; man, the rebel; the risible man.

The chief objectives of the course are pupil commitment and pupil self-discovery. Each student is asked to create some "thing" or plan some "happening" during the school year. For example, one of the humanities students befriended a Negro girl in a local home for delinquent girls and arranged with a local dance teacher to give the Negro girl ballet lessons, this always having been the fondest, yet unfulfilled hope of the delinquent girl. Another student visited New York City and made a study of the technique of making "underground" movies. One team of girls conducted a series of sidewalk interviews on whether the persons interviewed really believed in life after death.

One of two grades is given to students--"A" for superior effort, "B" for acceptable effort. Students who seem to be unable to enjoy the course are asked to drop the course, but they are not considered to have failed it. The course is now in its third year. Of the approximately 140 pupils who have taken or are taking the course, only six have dropped the course.

Additional Information:
School district: Abington Heights School District
County: Lackawanna
Grade: 12
Pamphlet available upon request

Contact person: William H. Crum
Assistant Superintendent
Abington Heights School District
Grove Street
Clarks Summit, Pa. 18411

POWER MECHANICS

Power mechanics at Abington Heights High School acquaints the student with power production devices in terms of rotary and thrust power. Basic airmanship acquaints power mechanics students with aerodynamics and controlling an aircraft in space. Aviation education in the power mechanics program provides for assembling and constructing an actual glider and students having a chance to fly it.

Course requirements are to acquaint students with the idea of thrust power, model rocketry and operation of a jet engine. Mathematical applications are realized in thrust measurement, fuel consumption and altitude measurement. Many phases of physics, as well as mathematics, are incorporated into the power mechanics course.

Because the internal combustion engine is so common in the United States and because of the interest students display, an indepth study of the four-cycle gasoline engine makeup and theory of operation is explored. Small engines are torn down, examined, rebuilt and started. The reconditioned engines are then mounted on dynamometers and the results are compared with manufacturer's specifications. To complete the experience automobile engines are torn down, rebuilt and operated.

Part of the individual program of study requires each student to create a research notebook that thoroughly explores an area of transportation which interests him. The power mechanics course at Abington Heights is designed to strengthen academic concepts studies in science and mathematics by utilizing intuitional motor skills of students in a meaningful laboratory situation.

Additional Information:
School district: Abington Heights School District
County: Lackawanna
Grades: 11-12
Pamphlet available upon request

Contact person: W. H. Crum
Assistant Superintendent
Abington Heights School District
Administration Building
Grove Street
Clarks Summit, Pa. 18411

RELIGIOUS LITERATURE COURSE

This course in the religious literature of the west offers an opportunity to learn in some detail of event and depth of meaning the dramatic experience with God which the classical literature of Judaism, Christianity and Islam presents to the world. Where the question arises asking whether this is a course in literature or one in religion, the answer may be found in the suppositions that what is read is generally regarded as literature and that the subject matter of this literature is human experience which most people agree concerns religion. However, whatever the predetermined attitude toward the Old Testament, the New Testament and the Koran, they do represent literature rich in universal meaning and influence. They are accounts eminently worthy of learning and appreciation.

Additional Information:
School district: Abington Heights School District
County: Lackawanna
Grades: 11-12
Pamphlet available upon request

Contact person: William H. Crum
Assistant Superintendent
Abington Heights School District
Grove Street
Clarks Summit, Pa. 18411

CENTRAL SCHOOL--SIXTH GRADE CENTER--BEHAVIORAL ADJUSTMENT PROGRAM

The program was initiated because some classrooms were being disrupted by students with behavioral problems. The aim of the program is to help pupils become aware of their behavior by having them think about causes, consequences and alternatives that could have been used.

Classroom teachers refer pupils prior to (if possible) any confrontation taking place. The objectives are carried out through conversation, diagnostic testing and use of special instructional materials.

The program also serves as liaison between some of the special services offered by the school district and the classroom teacher. These services include the home and school visitor, the reading consultant, the school psychologist and school nurse. Individual programs are developed to help the students adjust and return to their regular classroom situation.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 6

Contact person: Robert J. Unser
Principal
Central Elementary School
Allentown School District
Turner and Lumber streets
Allentown, Pa. 18102

CONTEMPORARY POLITICAL-ECONOMIC PROBLEMS

This is a new course offered only at Louis E. Dieruff High School. It is concerned with community issues of the '70s. Areas treated include the origin of the modern city; development of regulation, e.g., police, zoning, local government, operation of urban economy and local relationships with state and national problems. Designed to stimulate understanding and acceptance of civic responsibility, this course requires students to develop and submit a completed neighborhood renewal plan based on actual field research as well as independent inquiry, group discussion and expression of community awareness.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 12

Contact person: John W. Monaghan
Supervisor of Social Studies
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

ELEMENTARY DRUG EDUCATION PROGRAM

This program has been developed and initiated by the school nurses of the district as an interim program until a comprehensive Kindergarten through 12th grade health education and family living curriculum is introduced.

It is in the early formative years that attitudes must be developed to serve as a basis for understanding, respecting and appreciating the role of drugs in life and health. Therefore, on the kindergarten through 3rd grade levels, the nurse uses the filmstrip "Drugs: Friend or Foe" as a basis for helping the young child to know and understand that drug products, household substances and environmental factors affect health.

Drugs, when properly used--as prescribed by the doctor and taken only from the doctor, the nurse or parents--benefit the individual and often save lives. Certain medicines contribute to health such as immunizations against disease, antiseptics to prevent and treat infections and antibiotics for prevention, control and treatment of illness and disease.

Medicines can be harmful to our health if taken when not needed, when taken from friends or when taken by accident.

The children are encouraged to discuss with their parents safe ways to store and dispose of medicines and to check where common household products are stored. Are they kept away from young children and pets?

The nurses use the filmstrip "Drug Abuse: Who Needs It" to lead the 4th, 5th and 6th graders on to develop a definite knowledge that misused medicines and drugs can have serious effects on the individual.

Further discussion is carried on to help them to understand that people abuse drugs for a number of reasons. "What led Larry into accepting a pill that he did not need?"

Sixth graders learn more about the commonly abused drugs, how they affect the brain and nervous system and alter body functions with the film "Drugs and the Nervous System" as the motivating force for discussion and class projects.

Teachers on all grade levels continue pupil interest in drug education with further discussion and class projects such as essays, poster contests, research and role playing.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: K-6

Contact person: Ardis V. Gaumer
Head School Nurse
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

ELEMENTARY SCHOOL GUIDANCE

The elementary guidance program in the school district is a developmental one, based on the philosophy that all children in the process of growth and development must master certain tasks if they are to progress normally. Therefore, the goal of the program is to create an optimal climate for student growth. It is concerned with providing experiences for all children that will facilitate developmental growth in attitudes, internal motivations, values and better concepts of self. It is preventive in nature, utilizing periods of nonstress to build strengths within the child upon which he can rely in times of stress. All children are reached through the involvement and team effort of teacher, parent, administrator, counselor and pupil personnel specialists. The counselor serves one building and functions in the role of counselors, consultant and coordinator.

The foregoing philosophy and goals are implemented through a variety of activities. One such activity is orientation; an in-service meeting for teachers is held at the beginning of the year to acquaint teachers with the goals of the program. In addition, each classroom is visited by the counselor to acquaint the children with the program and role of the counselor. Continuing teacher in-service is provided through grade level meetings, bulletins and monthly guidance newsletters. Classroom guidance activities are carried out by the counselor to stimulate the teacher's interest and involvement in program. A guidance committee meets and grade level meetings and a survey of pupils' needs are undertaken to formulate guidance activities for a year. A "self-concept program" to give positive recognition and a sense of worth to children who experience difficulty in school is in the initial stages, as is a models program to encourage a sense of working together.

For those children who need additional assistance in mastering a certain task--those who are temporarily incapacitated by emotional stress and must be helped back on the normal course of development--individual and small group counseling is provided.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: K-6

Contact person: Harley S. Stewart Jr.
Principal
Mosser Elementary School
Allentown School District
Dauphin and E. Union streets
Allentown, Pa. 18103

ENGLISH AS A SECOND LANGUAGE

The "English as a second language" program was instituted in the junior high schools in September 1969. The program was set up to take all nonEnglish speaking students of junior high school age whose inability to speak, read, write or understand English was deemed sufficient to hamper their ability to function in a regular classroom situation.

Our primary goal of teaching these students to understand and speak English is most strongly emphasized. Oral drills with the teacher or the aide are part of our daily program. Machines such as the tape recorder, record player and language master are valuable as devices for review and additional drill without involving teacher time. Movies and television are used to stimulate free and structured conversations. Sesame Street has been fun for all to watch and has helped many of the pupils in basic phonics. Other programs, like the 12 O'Clock News, help the children become acquainted with current American culture and frequently serve as springboards for lively discussions and comparisons with the child's own experience.

Less emphasis is placed on reading and writing, although pupils are required to do some of both each day, according to their individual ability. For the more able, reading a short story or the newspaper and writing a paragraph or 10 sentences may be required. For the newcomer or slower student, reading one or two sentences and copying them correctly from the blackboard may be a severe challenge. In reading we make use of the newly established reading laboratory and the services of our reading specialist. A dozen children report to this laboratory twice a week. Thanks to the laboratory, some of the children have found new confidence in their reading ability now that they can move at their own rate of development and compete only with themselves.

Finally, we hope to help our youngsters adjust to our culture without losing pride in their own. They spend at least one period a day in physical education, fine and practical arts or the library. Several of our girls have joined clubs and participate fully in their activities. We encourage the sharing of culture wherever possible. This may mean taking time to compare alphabets and words in different languages or having the girls teach us how to make a special food from the homeland. Whenever possible, other teachers and students are invited to share these special events with us.

There are many less formally defined areas of study. Test taking, American style, must be taught. Ideas on hygiene, school attendance and social mores are necessarily a part of the curriculum in order to keep children out of trouble and avoid their becoming social outcasts. We also try to help the children become aware of all the public agencies that can help them such as the school guidance office, free dental clinics, employment agencies and church and private charitable groups. Above all, we try to establish a classroom climate in which each student feels that he is important and that he can succeed in learning some part of English.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 7-9

Contact person: Fern Mann
Harrison-Morton Junior High School
Allentown School District
Second and Turner streets
Allentown, Pa. 18105

HEBREW I

Hebrew I became an elective for 7th grade pupils entering Trexler Junior High School in September 1971. If Hebrew follows the course of other languages presently taught in the Allentown City School District, it will ultimately be taught in senior high school on all levels, up to the fifth.

Hebrew is the language of Israel, a dynamic young nation with which a significant portion of our community strongly identifies. Many local students have visited and will continue to visit Israel; learning to speak Hebrew in our schools will have special meaning for such students. Offering Hebrew to our pupils is a significant gesture of ethnic good will.

In extending the limits of foreign language offerings in our junior high school, Hebrew is a choice that reflects a healthy movement beyond traditional languages to a less common use of growing importance to many pupils.

While Hebrew texts will eventually be read, initial emphasis will be on living Hebrew as spoken daily in normal human relationships.

Additional Information:
School district: Allentown City School District
County: Lehigh
Grades: 7

Contact person: Thomas G. Bruni
Supervisor of Foreign Languages
Allentown City School District
31 S. Penn St.
Allentown, Pa. 18105

HIGH SCHOOL ART FOR TOMORROW

Our high school art program consists of three teachers with complete art backgrounds including a conceptual approach toward the knowledge and appreciation of art. Each teacher has developed a speciality in which that teacher is particularly proficient.

Students rotate among these teachers. Upon completion of a project with one teacher, the student moves on to another project with the other teacher with each teacher's program integrating with the next. In this manner two- and three-dimensional aspects of art are covered. One teacher covers ceramics, silver and sculpture. Another teacher teaches the basic art and art appreciation courses, also teaching photography. During the year complete photographic equipment was installed. It is a unanimous conclusion that art and photography cannot be divorced from each other. The third teacher conducts classes in Art II and Art III. Students who are interested in developing their skills in good design and composition make up these classes. All forms of techniques of painting are covered with emphasis on fundamentals. By following this structured program, students progress to a more intelligent development in drawing, design and painting.

Outside sketching and homework are assigned. Sketchbooks are maintained and museums are visited. Annual trips are arranged. They include sketching at the Philadelphia Zoo and the New York Museums, including the Illustrators Show. Students arrive in class as early as 7:30 a.m. for special projects and poster projects. They also attend special figure drawing classes every Tuesday and Thursday after school with emphasis on portfolio preparation. Through the use of field trips, demonstrations by professional artists and former art students, the young people are further instructed and stimulated.

Additional Information:
School district: Allentown City School District
County: Lehigh
Grades: 10-12

Contact person: James P. Musselman
Art Department Head and Instructor
William Allen High School
Allentown City School District
Seventeenth and Turner streets
Allentown, Pa. 18104

HUMAN BIOLOGY AND ART ANATOMY

This course is for students who plan to take formal art training beyond high school and for students who desire to enrich their art backgrounds. More art schools are returning to formal study in anatomy, and our students will be well prepared to meet this need.

The advanced art student gains an insight into life and its functions through a study of simple life forms and also complex human structure and function. Drawing and visual interpretations go hand in hand with the microscopic study and dissections performed on specimens. Students learn about the systems within the body such as the skeletal, digestive, muscular, nervous, vascular, endocrine, glandular systems and reproductive systems. The study of molecular structure and cell tissue also aids in their further understanding of the differences present in individuals.

This course enables students to appreciate the symmetry, form and functional modifications inherent in the human body.

Additional Information:
School district: Allentown City School District
County: Lehigh
Grades: 12

Contact person: Jack Eagle
Art Teacher
Louis E. Dieruff High School
Allentown City School District
Irving and E. Washington streets
Allentown, Pa. 18103

THE HUMANITIES IN HIGH SCHOOL

Too rarely people understand that the study of the humanities can contribute significantly to the appreciation of the real worth of a society. With the introduction of the humanities, students and teachers can understand better the welding of a culture through the creative as well as the performing arts.

Believing that everyone could gain greater sensitivity towards each other by looking at human activities and relationships of the past, we instituted a program in the humanities that dealt with the depression years. The effects of the modern tide of affluence upon today's young people and the contrast with the effects of the great depression upon the lives of their parents are the main themes of the program.

In this course in the humanities, the departments of art, music, English and social studies form a teaching team to present these areas as they affected the culture of the '30s. The introduction of lay people--artists, authors, historians, et al.--from the community adds further impetus to the study of this past period. Visits to museums and demonstrations and performances by experts in each area reinforce the program. The use of visual and audio aids, as well as the use of mechanical devices, are other forms of reinforcement.

While never attempting to displace English or any of the academic subjects, this program in the humanities called "the desperate years" gives added strength to the basic subjects. It widens the horizons in reading and research and also offers some the means for actual participation and performance. It brings together teachers of the various departments who have never worked closely together before. It gives other departments (mathematics and science) a chance to display their contributions through lectures and seminars. It shows the entire school the benefits of harmonious working relationships. And to the lay community, it gives a better understanding of the work of the schools. But most important it sensitizes the pupils to the effects of life in their own generation.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 12

Contact person: Jacob M. Horst
Supervisor of English
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

INDUSTRIAL ARTS PROGRAM

Industrial arts education, at any level, is a fundamental and unique phase of the total school program and is an integral part of the student's total development. It provides students the opportunity of getting a better understanding of the industrial society of which they will become a member. It is consistent with the philosophy of preparing youth to be good citizens in a culture which is technologically dominated and scientifically oriented.

Industrial arts education at the junior high school level serves as an exploratory venture into certain phases of industrial experiences and affords a limited opportunity to apply some academic disciplines in the resolving of technical and mechanical problems.

Industrial arts education at the high school level is designed to meet the needs of both boys and girls. The available areas will be of a more sophisticated nature, wide in scope and in greater depth than those offered at the junior high school level. They represent the essential phases of general education dealing specifically with industry--its organization, materials, occupation, processes and problems. Through manipulative and research experiences with a variety of tools, materials, processes and products, students have opportunities to develop self-concepts in our industrial-technological culture which should help them assess the changing requirements for optimum participation in our free enterprise system.

The new program of studies for high school industrial arts, beginning with the 1971-72 school term, includes the following four areas:

Basic Electricity and Electronics
Fabrication (wood-metal-plastic)
Graphic Arts
Mechanical Drawing

These areas are offered on an elective basis to boys and girls and can be scheduled five or ten periods per week in 10th, 11th and 12th grades.

Industrial arts education is not a substitute for, nor in competition with, vocational education; it should be considered complementary to vocational education.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 7-12

Contact person: Leon B. Dissinger
Supervisor of Industrial Arts
William Allen High School
Allentown School District
Linden Street Wing
Seventeenth and Turner streets
Allentown, Pa. 18104

INNER-CITY COMPENSATORY PROGRAM--TITLE I

Project activities are designed to strengthen the instructional programs and the support services in the target area schools. Additional personnel for the instructional program include three preschool teachers, three preschool teacher aides and a parent-education specialist for the 100 children enrolled in the preschool program; eight reading teachers for work with small groups of children in the target area public and parochial schools; 34 teacher aides for work in the target elementary schools and a physical education teacher for physical education activities.

Support services have been expanded through the employment of an elementary guidance counselor, a home and school visitor and a part-time school psychologist. The supportive services are provided in order to remove the blocks which can prevent pupils from achieving success in school.

In regard to direct instruction, the preschool program, while never attempting to teach reading, seeks to develop the verbal abilities and experiential background of the preschool children in order to prepare them for success in reading. Parental involvement is important in this program, and a parents' advisory committee has been formed. The additional reading teachers work with small groups of students in the elementary grades. The teacher aides assist teachers in a variety of ways. Special assistance is being given to children for whom English is a second language.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: K-6

Contact person: Desmond J. Nunan
Administrative Assistant to the Superintendent
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

IN-SERVICE EDUCATION

Teachers can receive credits for salary increments for attendance at afternoon and evening in-service sessions conducted by the Allentown School District. Classes are conducted by school district specialists in various subject matter areas or by personnel from nearby colleges or agencies such as the public library.

Some of the courses which have been conducted are as follows: modern mathematics workshop, computer programming, the new social studies, Negro history workshop, astronomy for elementary teachers, teacher-made tests, learning disabilities, problems in administration, audio-visual workshop, today's art in the classroom, outdoor education workshop, science for elementary teachers, guiding student teaching experiences and public library resources.

Classes are conducted in the fall and spring and run from eight to sixteen weeks. One to three credits are earned on the basis of the number of hours in the course. Credits obtained by teachers are used to advance their status on the school district's salary scale. The credits are applicable for a bachelor's plus or a master's plus status. A master's equivalent cannot be issued by the school district. The school district provides increments at the bachelor's plus 12 and plus 24 levels and at the master's plus 15, 30 and 45 levels. Graduate school credits and school district salary credits may be combined to reach these plus levels.

In the guidelines developed for the courses, the purpose of the program is stated as follows: the classes are held for the purpose of studying problems, methods or techniques in areas directly related to some phase of teaching in the Allentown School District. They have as their objective the improvement of teaching in our schools.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: K-12

Contact person: Desmond J. Nunan
Administrative Assistant to the Superintendent
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

INTERIM SCHOOL

The program was initiated to meet the health, social and educational needs of pregnant adolescents. Until the inception of the interim school, pregnant girls were disenrolled from school as soon as the pregnancies were verified. For most of them this meant the termination of formal education and help at a time when they really needed assistance. Many of these girls became potential welfare recipients because they left school before they could complete any training for employment.

The school is located in a building which is separated from all of the secondary schools. The girls are transferred from their home schools at the end of a rating period. They are enrolled in the same courses at the interim school as they were in their home schools. After delivery, they return within two weeks to the interim school until such time as their physical condition and academic achievement permit a transfer to the home school.

Instruction is provided in English, social studies, mathematics, business subjects and foreign languages by three part-time teachers and by well-qualified volunteers. A full-time nurse-counselor conducts group discussions on health habits, baby care, child delivery and social problems. She is also available for individual counseling. Referrals are made to community social and health agencies. There is remarkable cooperation between the school personnel and the medical professions, hospital clinics and the visiting nurse association.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 9-12

Contact person: Dorothy E. Filer
Director of Guidance
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

INTERMEDIATE SCIENCE CURRICULUM STUDY PROGRAM

To challenge the better students in the area of science on the 7th grade level, a decision was made to use the "intermediate science curriculum study" as a pilot program in one junior high school. The program gives the student a sequential picture of the structure and process of science. It is laboratory-oriented so that the student is constantly experimenting, making observations, collecting data and interpreting all this in the light of several statements or conclusions. The course is individualized to take care of the broad range of student ability. It is self-pacing--the students work through the activities and excursions at their own speed.

The objectives of offering this program are:

1. The students work independently at their own pace.
2. The teacher is free to move around the room answering questions or giving individual help.
3. The students come to know that learning how to get answers is just as valuable as learning the answers themselves (process).
4. The students learn to think inductively and deductively by being involved.
5. The students have the opportunity to self-evaluate their accomplishments through the prescribed activities or excursions.

This program is the first level of a three-year sequential instructional system basically developed at Florida State University.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 7

Contact person: Ernest A. Papp
Supervisor of Science
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

LEARNING THROUGH INDIVIDUALIZED PLACEMENT

This program was initiated three years ago at the Union Terrace Elementary School. It was designed to give the children an opportunity to move at their own rate of progress in the language arts area and in the mathematics area by grouping them homogeneously, cutting across grade lines and maintaining flexible groups. In the social content areas, they are grouped heterogeneously. In this manner, advantages of both types of grouping are utilized effectively and the children are being challenged with frustration being kept to a minimum.

Three teacher aides are employed two hours a day to aid in the preparation of materials and to make it possible for the teachers to meet once a week. At these meetings which are held for levels one and two, two and three, three and four, four and five, the teachers are able to discuss the individual children, their needs, possible transfers from group to group, curriculum needs and techniques for teaching them.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 2-5

Contact person: Mary E. Wagner
Principal
Union Terrace School
Nineteenth and Union streets
Allentown, Pa. 18104

LINGUISTICS IN GRADE 7

The study of language is the most comprehensive of all studies, basic to all human culture and linguistics is the modern way of looking at language. Grade 7 is a new experience physically, socially, emotionally and intellectually for our people. In the previous six years of schooling they have received a variety of grammatical treatments, often with no consistent pattern. Some covered much grammar; some little. Some acquired graceful spontaneity in language use, others never acquired simple facility. Believing that 7th grade is an appropriate psychological time to take a new look at language, we introduced the study of structural linguistics.

English majors knowledgeable in the intricacies of language were few. Teachers, too, had only an elementary acquaintance with the subject. We instituted a series of in-service seminars to train teachers of English in grade 7. Suitable books were another problem. Only in the past few years have usable secondary school texts in linguistics become available.

The study of structural linguistics has brought a new way of looking at language. By observing language in real contexts, in actual speech and writing, we can see how language works. We can begin to understand why persons talk as they do and others write in their own pattern. Because children see and hear how language operates when put into practice, they participate in real learning.

Additional Information:
School district: Allentown City School District
County: Lehigh
Grades: 7

Contact person: Jacob M. Horst
Supervisor of English
Allentown City School District
31 S. Penn St.
Allentown, Pa. 18105

MUSIC 10

This course was conceived to introduce students, through both audio and visual means, to the physical and ideological relationships of man to his world. It was felt that college-bound students could use an informal survey of ideas that are both topical and chronological. It is an elective course, available for one semester only, two times per week. Students listen to and observe each presentation, and if they wish during the last six weeks of the course, prepare a short research paper on any topic covered which might interest them. Study suggestions are provided each class period.

Twenty-nine tapes of about one-half hour each have been prepared in conjunction with 75 to 100 slides on the subject presented on the tapes. These slides are for the most part duplicated from pictures in books by a 35 mm Exacta camera using a standard copy desk for reproduction. The slides are then put in order and synchronized with the tapes through a Norelco Tape-Synchronizer, which changes all slides automatically. Thus each lecture is always ready for instant reproduction.

The last six class meetings are used by the students to prepare their own music-slide-lecture show. Topics vary, as does the music, to include pollution, drugs, contemporary living, jazz and electronic music.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 10

Contact person: W. Valgene Routch
Supervisor of Music
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

MUSIC THEORY PROGRAM FOR SENIOR HIGH SCHOOL STUDENTS

This district realized the need to increase interest of students who were planning careers in music. It also saw a need to improve the music preparation for students who were prospective elementary school teachers and who would need to teach music as part of their program. The objectives of music theory are to clarify the structure, texture, terminology and notation of music to help the student body become more intelligent as listeners and to help singers and instrumentalists develop a foundation for musicianship.

Three courses are offered beginning in 10th grade--Music Theory I, II and III. Music Theory I stresses such areas as notation, scales, rhythm and meter, chords and their inversions, cadences, phrasing and smaller forms, poetry scansion, original composition, ear-training and sight-singing skills, accompaniment patterns and keyboard facility. Music Theory II develops skills and conceptual understandings in chorale part-writing, analysis of larger forms, orchestration, sight-singing modulatory songs, keyboard facility related to theoretical study and melodic and harmonic ear-training. Music Theory II entails the development of creative skills and aural perception through extended forms, counterpoint, conducting, improvisation, 20th century composition, melodic and harmonic modulation in chorale dictation and relating theoretical study to stylistic characteristics of all periods. Programmed instruction tapes and electronic pianos are utilized throughout the three courses. The first course may be elected in either 10th, 11th or 12th grade but each course is a prerequisite for the next.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 10-12

Contact person: W. Valgene Routch
Supervisor of Music
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

NUCLEAR SCIENCE

A nuclear science course is offered as part of an enrichment program to high-ability students who wish to acquire a comprehensive knowledge in the field of nucleonics. It is open to those who have had a course in college preparatory or honors biology, completed the college preparatory or honors chemistry and physics course and are taking a rigorous mathematics course. The students taking the course have the opportunity to draw upon various previous backgrounds for resource materials. The course is offered to students in the 12th grade and provides seven periods per week for discussion, lecture and experiments.

The nuclear science course is intended to give the student an insight into the historical development of atomic concepts, atomic particles, electromagnetic radiations, the dualistic nature of radiant energy, concepts of the quantum theory, Compton scattering, the photoelectric effect and radioactivity. Radio isotopes are used as tracers in physical, chemical and biological experiments.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 12

Contact person: Ernest A. Papp
Supervisor of Science
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

PERFORMING ARTS IN SUMMER SCHOOL, TITLE I PROGRAM

A survey of pupils in the elementary and secondary schools of the district revealed that relatively few of the pupils had experiences in the performing arts. This was especially true in the target schools receiving Title I funds. A very limited number of pupils in the other schools had drama and dance lessons on a private study basis.

Therefore, a performing arts program has been organized for the six-week summer school in which students can develop stage presence and poise through related experiences in art, dance, drama and music. Each student has the opportunity for creative expression in these areas:

Music

Chorus
Solo
Ensemble

Art

Lighting and color
Stage set design
Scenery construction
Costume design

Drama

Improvisation
Character development and analysis
Stylized movements
Stage direction

Dance

Basic movements
Ballet
Modern
Creative dance

Instruction is given by a specialist in each area, with all pupils participating four hours daily, with one hour in each area. This program is offered to nine grade levels in three different classes (4-6, 7-9, 10-12). A musical is presented for public performance at each level as the culminating activity.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 4-12

Contact person: W. Valgene Routch
Supervisor of Music
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

PROGRAM FOR CREATIVITY IN MOVEMENT

A number of years ago the Allentown School District pioneered a course in creative movement. It was offered to the mentally gifted classes as an enrichment of the school curriculum. Children have an innate desire for movement; to move creatively is the art of using the body as a tool of expression. It is a way of exploring familiar ideas of the curriculum and creating compositions of body movements to express these ideas. In this way, children learn more than simply facts and their logical relationship--instead they develop feelings and insights about what they have studied. Learning becomes more exciting and a real remembering experience occurs because of children's physical involvement in creating a composition entirely their own. The possibilities of personality development are tremendous.

We have learned that creating a composition in movement is a highly democratic way of working. For the good of the composition, children learn to put "self" in the background and learn to think and react objectively to a situation. In this relaxed atmosphere, they can feel free to be themselves for all ideas are respected and shared. The teacher and class become a closely knit group, bent on solving a single problem. In trying to find a solution to this problem, a process of experimentation and correction begins. This is the creative search for truth which, after all, is the purpose of education.

We have learned that the most wonderful by-product of creativity in movement is the personal discovery children make as they have to learn to search for this truth and reality in life. Through this exciting experience, they discover themselves, and they begin to truly understand themselves. With this new-found freedom of spirit, their personality has a chance to blossom because the truth for which they were searching has set them free.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 4-6

Contact person: Judy Moatz Hummel
Assistant, Elementary Physical Education
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

A SUMMER SPEECH THERAPY PROGRAM FOR ELEMENTARY SCHOOL CHILDREN

This program was initiated as an attempt to reduce the case load of the speech correctionists during the school year by incorporating a select group of children in a six-week concentrated speech therapy program. This program is conducted during the early summer, beginning approximately two weeks after the close of school.

This program is set up to eliminate the speech problems of the children found to have a single articulation defect for which the prognosis for correction is favorable. These children are selected following a screening test of all 1st graders near the termination of the school year. It is anticipated that these children will be corrected and will not need to be included in the speech therapy case load during the regular school year; thus, more time can be devoted to the correction of the more severe articulation problems.

An essential aspect of the program is the encouragement of parental participation. Frequent consultations between the parents and the correctionists enable the parents to reinforce the therapy lessons.

Additional Information:
School district: Allentown School District
County: Lehigh
Grade: 2

Contact person: Bertram J. Hilbert
Speech Correctionist
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

THREE-WEEK MINI-COURSE FOR SENIOR HIGH SCHOOLS

This program is a response to enthusiastic student-faculty requests for the creation of short term special interest courses covering a wide variety of topic areas apart from regular courses. It is designed to be self-contained in the social studies department with no interference with other discipline schedules.

Seniors will sign up for courses during a two-week period in October in their respective social studies classes. A master schedule will be maintained in the social studies department office for control purposes. Class size will be held to a maximum of 20 students. Students selecting a mini-course will attend these courses during the time slot previously used for regular social studies classes. Those not interested in mini-courses will be assigned to a special study area.

The mini-course program will begin on the first day of January after Christmas vacation and will be terminated on the last day of the regular semester.

Classes will be conducted on an informal basis implementing independent study and student leadership at the discretion of the instructor. Approximately four different classes will be offered in each time slot. Some examples of these course topics are: Crime and Justice in Urban America, Black Culture in America and Seminar on Middle-East Crisis.

No tests will be given for grades and grading will be confined to pass or fail with no formal credit given except that a notation of attendance will be placed on student records.

Mini-courses will be offered primarily by teachers of senior social studies courses with each instructor asked to offer several different mini-courses.

Additional Information:
School district: Allentown City School District
County: Lehigh
Grades: 12

Contact person: John W. Monaghan
Supervisor of Social Studies
Allentown City School District
31 S. Penn St.
Allentown, Pa. 18105

TRANSITIONAL CLASS

Each year many kindergarten children do not have success in their first school experience, yet when tested they exhibit average or above intelligence quotients. In order to prevent failure in future years and to build a good attitude toward school, the transitional class for children with learning disabilities was established. Most of the children have audio and visual perception deficits plus general movement problems. The major objective of the program is to enable children, usually 6 or 7 years old, to get over their learning disabilities and proceed through the rest of their school years at a successful rate.

The goal is reached by the following procedures:

1. Having the children in school for a complete day instead of only a one-half day, such as the child who is repeating kindergarten.
2. Using the Frostig program for visual perception.
3. Using the move-grow-learn program for movement.
4. Using the sound-order-sense program for auditory perception.
5. Allowing the children to set the pace for all work that is done.
6. Individualizing a program to meet the needs of each child.
7. Building a good attitude toward school through direct personal relationships.
8. Promoting each child, either to 2nd grade or to a regular 1st grade. This is done according to the child's progress.

Children in the transitional class last year, who were promoted to 2nd grade, are doing very well in all subject areas. No one is having any academic problems which would cause failing. The same can be said for those children who were promoted to a regular 1st grade. Both the former and the present transitional class children are very happy because none of them have had to experience failure.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: 1

Contact person: Harley S. Stewart Jr.
Principal
Mosser Elementary School
Allentown School District
Dauphin and E. Union streets
Allentown, Pa. 18103

TUTORIAL PROGRAM--STUDENTS HELPING STUDENTS

The students helping students program has been in existence for several years. There are varying degrees of participation depending on the needs of the children, the tutor and teacher. Although grade peer helping is encouraged, the more formalized students helping students program involves intermediate children helping primary children approximately 15 minutes prior to each school session. Tutors must be carefully trained so that they know what is expected of them. They receive daily plans of instruction so that they feel confident when they face their group. The performance of the tutor and the students is continually evaluated. Assignments are changed weekly. Tutors have been utilized primarily in the language arts.

Tutors:

1. Participate voluntarily and find satisfaction in helping others.
2. Experience a sense of understanding of how children differ.
3. Have discovered how to contribute to well being of others.
4. Are aware of need for one-to-one relationship.
5. Grow in understanding of the growth pattern of children.
6. Have discovered the meaning and need for organization of subject being taught.
7. Increase their skill in finding ways to actively participate in the daily reading program.
8. Grow in their understanding of how dependent society is upon other members of society.
9. Realize the importance of being able to relate to people.

Students:

1. Experience joy and satisfaction in this informal way of learning.
2. Grow because this affords them another opportunity to become involved.
3. Become increasingly aware of successful learning experiences which were begun early in the year.
4. Realize that this is another opportunity for them to emerge from their shells.

5. Become aware that other people can relate to them other than the teacher.
6. Realize that this association enriches their learning environment.
7. Discover a bond of friendship developing through this association.
    a. High achievers begin to appreciate another opportunity for them to experience.
    b. Lower achievers experience no frustration--only satisfaction with their groups.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: K-6

Contact person: Charles C. Harmany
Principal
Hiram W. Dodd School
Allentown School District
S. Church and Mohawk streets
Allentown, Pa. 18103

THE VISUAL LINGUISTIC READING PROGRAM

Four 1st and 2nd grade classes are among 200 classrooms scattered across the United States participating in an experimental reading program.

Four key principles highlight the program:

1. Minimize the child's initial difficulties.
2. Control with care the early formation of desired reading and word attack habits.
3. Meet a wide range of individual differences.
4. Enhance the teacher's effectiveness and position.

The materials teach reading by using varied materials; namely readers, word introducers, story introducers, programmed workbooks, reading and listening tests and other specially-structured linguistic materials. The readiness material consists of a series of transparencies teaching the alphabet by means of an interesting character named ALPHY. After a few exposures to him, the children consider ALPHY as a person. The word and story introducers consist of transparencies to be used with the overhead projector. Most of these visuals include a picture to illustrate the word or story. The programmed workbooks provide added reinforcement for the word and word-sound relationships being learned.

The emphasis on listening skills and the highly motivating quality of the material provide an interesting experience for beginning reading.

Additional Information:
School district: Allentown School District
County: Lehigh
Grades: K-3

Contact person: Frieda L. Wahrmann
Supervisor of Reading
Allentown School District
31 S. Penn St.
Allentown, Pa. 18105

THE ELEMENTARY DEVELOPMENTAL GUIDANCE DEMONSTRATION CENTER

A major task of education is to establish a learning climate in which all children can develop well adjusted concepts of self. Elementary developmental guidance is concerned with providing experiences for all children to aid them in normal developmental growth in the areas of attitudes, values and self-understanding. It is on this premise that the Elementary Developmental Guidance Demonstration Center at Penn Lincoln School in Altoona was initiated at the beginning of the 1967-68 school term. This demonstration center was one of five such centers in Pennsylvania which were funded as three-year projects by the Department of Education.

In identifying and meeting the needs of all students, the role of the counselor was centered in three major areas of responsibility: counseling, consultation and coordination.

In fulfilling the counseling role, the counselor worked mainly with students on a preventive rather than remedial basis. An attempt was made to aid children in establishing accurate self concepts and in becoming more effective in dealing with their present environment. This was attempted through group as well as individual work.

In the consultative role, the counselor spent a major portion of time in activities with parents since a definite need was apparent. Individual and group activities with teachers, administrators, pupil personnel services and community agencies were also included.

The role of coordination of the guidance services included activities involving outside referral agencies, the school testing program, the educational records and school information services.

The developmental guidance project was evaluated in April 1970 by two persons from the Department of Education, a counselor educator and an elementary school counselor. Written evaluations were also received from parents, school administrators, teachers and students.

At the conclusion of the developmental guidance project in June 1970, the Altoona Area School District expanded the developmental guidance program to include eight elementary schools and two counselors. These programs have been developed to include all of the services and activities which were initiated at the Penn Lincoln School.

Additional Information:
School district: Altoona Area School District
County: Blair
Grades: K-6

Contact person: Kathleen O'Rourke
Elementary Counselor
Penn Lincoln School
Altoona Area School District
411 Twelfth St.
Altoona, Pa. 16602

TEAM APPROACH FOR READING-LEARNING PROGRAM

The need for a program designed to provide a total team attack upon not only individual difficulties encountered in reading but upon the entire constellation of personal problems which delay progress in the development of proficiencies has led this district to concentrate on a reading-learning oriented program. Full and part-time staff include a supervisor, reading coordinator, media specialists, a psychologist, guidance counselors, social workers, clinicians, teachers, a librarian and aides. The project is funded both locally and federally. Over-all plans include initial mass screening for the identification of students, clinical diagnoses to determine specific problem areas, corrective instruction or referrals to appropriate ancillary agencies for related services as needed.

In order to promote a strong carry-over from clinical diagnostic and remedial help to everyday living, classroom teachers and principals are involved in every phase of the program. Regularly scheduled conferences and in-service sessions are conducted. Both mobile and permanently based reading clinics are used in order to provide services in all geographic areas of this large school district.

The time consuming task of locating or preparing appropriate remedial reading materials to meet individual needs has been eased by the establishment of a media center. From this centrally located reservoir of instructional reading skills development materials, individual prescriptions for classroom use are filled and continuously evaluated for all students who have been diagnosed in clinics.

Additional Information:
School district: Armstrong School District
County: Armstrong
Grades 2-9 (greatest emphasis--grades 3 through 6)

Contact person: Margaret W. Shumaker
Supervisor of Specialized Curriculum
Armstrong School District
Box 191, Water Street
Manorville, Pa. 16238

INDIVIDUALLY PRESCRIBED INSTRUCTION--MATHEMATICS

When the school district's study of programmed instruction to provide for individual differences fell short of its goal, the program for individually prescribed instruction in mathematics was developed. The school staff was thoroughly briefed on procedures to be used and was employed for the summer prior to the program's introduction to develop objectives, to identify materials and to develop new materials where necessary. The program was explained to the parents involved through parent-teacher association meetings.

In the program the total mathematics curriculum of the elementary school is placed on a continuum with students progressing at individual rates. The goals and objectives of the program are translated into behavioral objectives which can be easily evaluated. There is continuous construction of tests to measure the effectiveness of instruction.

Additional Information:
School district: Baldwin-Whitehall School District
County: Allegheny
Grades: K-6

Contact person: J. Ernest Harrison
Superintendent
Baldwin-Whitehall School District
4900 Curry Road
Pittsburgh, Pa. 15236

INDIVIDUALLY PRESCRIBED INSTRUCTION--READING

When the school district's study of programmed instruction to provide for individual differences fell short of its goal, the program for individually prescribed instruction in reading was developed. The school staff was thoroughly briefed on procedures to be used and was employed for the summer prior to the program's introduction to develop objectives, to identify materials and to develop new materials where necessary. The program was explained to the parents involved through parent-teacher association meetings.

In the program, the total reading curriculum of the elementary school is placed on a continuum with students progressing at the individual rates. The goals and objectives of the program are translated into behavioral objectives which can be easily evaluated. There is continuous construction of tests to measure the effectiveness of instruction.

Additional Information:
School district: Baldwin-Whitehall School District
County: Allegheny
Grades: K-6

Contact person: J. Ernest Harrison
Superintendent
Baldwin-Whitehall School District
4900 Curry Road
Pittsburgh, Pa. 15236

INDIVIDUALLY PRESCRIBED INSTRUCTION--SCIENCE

When the school district's study of programmed instruction to provide for individual differences fell short of its goal, the program for individually prescribed instruction in science was envisioned. The school staff was thoroughly briefed on procedures to be used and was employed for the summer prior to the program's introduction to develop objectives, to identify materials and to develop new materials where necessary. The program was explained to the parents involved through parent-teacher association meetings.

In the program, the total science curriculum of the elementary school will be placed on a continuum with students progressing at individual rates. The goals and objectives of the program are translated into behavioral objectives which can be easily evaluated. There is continuous construction of tests to measure the effectiveness of instruction.

Additional Information:
School district: Baldwin-Whitehall School District
County: Allegheny
Grades: K-6

Contact person: J. Ernest Harrison
Superintendent
Baldwin-Whitehall School District
4900 Curry Road
Pittsburgh, Pa. 15236

THE MASS PRODUCTION TECHNIQUE IN INDUSTRIAL ARTS

One major goal of industrial arts teaching is to arrive at an understanding of industry. Critics of industrial arts programs often state that this objective is the most neglected and disregarded of any which we claim for industrial arts. To attempt to meet the objective by showing movies, leading discussions or conducting business-industry-education programs is to miss making use of a most valuable learning experience--student involvement in actual mass production procedure. Industrial arts has always been a "doing" subject. Film and lectures are not sufficient to stimulate interest in and enthusiasm for a real understanding of industry and its processes. Active experiences bring about the most effective learning with the greatest amount of retention.

Delmar Olsen has challenged industrial arts personnel to "industrialize and intellectualize" their industrial arts courses. Yet, there is stagnation in many laboratories when teachers cling to the customary assigned projects year after year.

Everyone agrees that students must be taught about industry and its processes. The single most outstanding characteristic of American industry is its use of mass production techniques. This revolutionary procedure has brought this country and its people the highest standard of living on earth. Mass production is vital to future progress and prosperity.

The mass production technique is an active, doing technique. Through the proper use of this technique, industrial arts teachers simulate industry in designing, producing and distributing projects of high quality and quantity by organizing the construction processes into basic tasks or operations performed by individual students.

Additional Information:
School district: Baldwin-Whitehall School District
County: Allegheny
Grades: 7-9

Contact person: Harry Glaser
Industrial Arts Instructor
Baldwin-Whitehall School District
4900 Curry Road
Pittsburgh, Pa. 15236

SALABLE SKILLS IN HOME ECONOMICS IN A COMPREHENSIVE HIGH SCHOOL

The program was initiated to fill the need of students with limited abilities by providing them with skills that would benefit them after graduation from high school. Specific needs of the students were determined in conferences including the county home economist, the school's home economics department, the principals and representatives of the community.

By providing students with a specific skill upon completion of high school, the program attempts to reduce the dropout rate of students with low ability. The courses offer a variety of skills to meet varied needs and interests and provide the students with opportunities to meet with some degree of success, thereby encouraging increased participation. Among the skills being developed are child care and food services. Whenever possible, students are placed in community establishments for on-the-job experiences.

Additional Information:
School district: Baldwin-Whitehall School District
County: Allegheny
Grades: 10-12

Contact person: J. Ernest Harrison
Superintendent
Baldwin-Whitehall School District
4900 Curry Road
Pittsburgh, Pa. 15236

RESTRUCTURING ENGLISH FOR A COMPREHENSIVE PROGRAM

Bellefonte Area Senior High School wrote an ESEA Title III proposal to restructure its English curriculum to permit a comprehensive program of nongraded electives and received federal funding for this venture February 14, 1968.

The rationale for this project was the increasing awareness on the part of the English department that the language arts program was meeting neither the needs of the students for meaningful learning nor the aspirations of the teachers for rewarding teaching.

The prime objective was to restructure the English curriculum in the senior high school to provide a comprehensive program of required and elective courses--the substitution of interest grouping for homogeneous grouping (nongrading of the entire senior high school in English rather than the usual lock step method) and formation of a variety of courses, each lasting six weeks rather than the usual semester of year courses.

As a result, a great variety of unit courses, each six weeks in length, can be offered. The only exception at present is journalism, which runs a full semester. The student has approximately 40 course offerings each semester from which to choose. These choices are then interpreted and scheduled over the three six-week grading periods of a semester.

The new program has provided the teacher the opportunity to select and teach in areas of special competence and interest while giving him specific short term goals to attain. It has given the teacher a great amount of individuality, because each is encouraged to create courses of real student interest and learning.

The students appear to like the program for several reasons: (1) They can enter into an indepth study of a specific area of their choosing for six weeks; (2) they may, and usually do, change teachers every six weeks as courses change; and (3) they do have at least a 75 per cent chance of being enrolled in the courses of their particular selection each semester.

The purpose of the entire project is to enrich the program in language arts for all students by offering courses above and beyond those usually seen in the senior high school curriculum.

Additional Information:
School district: Bellefonte Area School District
County: Centre
Grades: 10-12
Pamphlet available upon request

Contact person: M. Richard Wolford
Principal
Bellefonte Area School District
E. Bishop Street
Bellefonte, Pa. 16823

RESTRUCTURING SOCIAL STUDIES FOR A COMPREHENSIVE PROGRAM

Bellefonte Area Senior High School has also set up a social studies program that is structured in much the same manner as our ESEA English program. All objectives are the same and approximately 45 courses are offered each semester.

This has been a most interesting and successful venture with such courses as "youth in modern society, population, revolution and poor America" being offered.

There is a staff of seven teachers plus a paraprofessional to service approximately 950 students.

Additional Information:
School district: Bellefonte Area School District
County: Centre
Grades: 10-12
Pamphlet available upon request

Contact person: M. Richard Wolford
Principal
Bellefonte Area School District
East Bishop Street
Bellefonte, Pa. 16823

OPERATION HEAD START--PRESCHOOL EDUCATION

Operation "head start" in the Berks County schools was first instituted in the summer of 1965. As a federally-funded program through the Office of Economic Opportunity, the program is provided in order to meet the needs of preschool children, 4 and 5 years old, from economically-deprived families. Although head start is not unique to Berks County alone, there is some evidence to indicate that this particular head start program is working effectively on all levels of operation.

In addition to year-round head start, a Berks County preschool education program sponsored by the Berks County Board of Commissioners utilizing local and Pennsylvania Department of Welfare funds was organized in the fall of 1970. Similar to head start, the program is an example of what can be accomplished for deprived preschool children through the combined efforts of the local community action agency, the public schools and "united way" agencies interested in child and family welfare.

A typical head start-preschool class illustrates the "team approach" to early childhood education, i.e., teacher aide, volunteer, parent, social worker, driver, etc., coordinating their efforts for the purpose of meeting the needs of disadvantaged children of working mothers.

The preschool program also involves centers for handicapped children, after-kindergarten, after-school day care and family day care homes.

The total funding for both of these programs as operated by the Berks County school board approaches the million dollar figure. A support staff to operate this program under the leadership of Kermit C. Bartholomew, administrator, includes an education coordinator, social services coordinator, caseworkers, supervisor of handicapped program, nutritionist, itinerant teacher, nurse, dental hygienist, program directors, parent involvement coordinator and early childhood consultant.

A Community Coordinated Child Care committee representing consumers, public and private service agencies, public schools, business and industry functions in an advisory capacity for the development of the total program.

Additional Information:
School district: Berks County schools
County: Berks
Grades: Preschool and Pre-K
More complete information available upon request.

Contact person: Francis R. Deitrich
Assistant Director
Berks County Intermediate Unit #14
Courthouse, 11th Floor
Reading, Pa. 19601

A DESCRIPTION OF SCIENCE--A PROCESS APPROACH

The scientist makes use of certain definable intellectual tools in the investigation of natural phenomena. These tools are the processes of observing, classifying, measuring, inferring, predicting and interpreting.

The main objective of science--a process approach--is to teach these processes and to develop specific competencies along these lines. The process approach places the student in an active and interesting role of investigating science by using the processes of the scientist. Through the systematic use of these processes in the primary grades and in grade 4, the student becomes capable of handling more complex science learning.

This program is not a textbook approach; it is not even a content-oriented program, but it is rather process oriented. This program is workable for all students because they can learn with a minimum of reading skills. It heightens their observation skills and allows them to experience success in the process of learning and discovering new information through personal-learning experiences. It encourages self-expression.

The teacher does not instruct. Rather, the teacher presents each problem or assists the student in identifying a problem. The teacher provides the direction and guidance in solving each problem; this is accomplished by a guide of exercises that is specifically designed to alter the student's behavior in a way which can be observed, measured and evaluated by the teacher. The exercises go from the simple to the complex. Each builds on what the child has learned and consequently prepares the child for future learning.

Additional Information:
School district: Bethel Park School District
County: Allegheny
Grades: K-4
Pamphlet available upon request

Contact person: Vance L. Sanford
Lincoln Elementary School
Bethel Park School District
1524 Hamilton Road
Pittsburgh, Pa. 15234

DISTRIBUTIVE EDUCATION

The distributive education program was established when it was realized that there was a need for a cooperative work-experience situation where students could gain insight in a particular field and its employment opportunities. The program is designed to provide a combination of theory and practice, to furnish practical training and to increase student interest in distribution, thereby helping to bridge the gap between the school and the business world.

Two years are devoted to the program, offering a variety of classroom instruction in the junior year including human relations, job application and interview, display, advertising, salesmanship and merchandise information. The senior year stresses advanced classroom instruction including market research plus cooperative work-experience which includes record keeping and individualized assignments. The student is evaluated by the immediate training sponsor and teacher-coordinator.

All distributive education students have the opportunity to join Distributive Education Clubs of America. By participating, the students are able to carry their classroom instruction into a competitive area in all aspects of marketing and distribution.

There has been no formal evaluation, but constant evaluation is conducted by the program's teachers, students, cooperating business house managers and administrators. The program has doubled in size since 1968-69. An additional teacher-coordinator was hired.

Additional Information:
School district: Bethel Park School District
County: Allegheny
Grades: 11-12

Contact person: Andrew A. Fiorentini
Distributive Education
Teacher-Coordinator
Bethel Park School District
309 Church Road
Bethel Park, Pa. 15102

INDUSTRIAL ARTS

The industrial arts program at Bethel Park offers boys and girls opportunities to become proficient in one area or explore in depth each of three. Since 71 per cent of our students pursue further education, courses have been designed to facilitate this transition and maintain a program that will offer meaningful experiences to the remaining 29 per cent.

At the middle school level we offer unified arts. This course offers boys and girls in the 6th, 7th and 8th grades combined experiences in art, industrial arts and home economics. The progression from basic understanding of tools and equipment to areas of independent study integrating all areas is encouraged.

At the senior high school level, our 9th grade students spend nine weeks in each of four areas. This introductory course is designed to acquaint each person with the content of each area so that the person may better select the laboratory to pursue. At the 10th, 11th and 12th grade levels, four areas are included in the curriculum to provide broader exploration. These include:

1. Technical Drawing--Students move from elementary drawing through machine, architectural and developments.
2. Electronics--Students begin with the study of basic components and proceed to the superhet radio, transistors, tubes, television and computer circuits, stressing instrumentation and trouble shooting.
3. General Metals--Students are taught layout and proceed through the various processes in cold metal, sheet metal, foundry and the machining devices necessary to manufacturing.
4. Graphic Arts--Students are offered training in the details of layout, photography and offset press operation.

When power mechanics is added to the curriculum the overall program will meet the needs of the community in preparing its young people for their future in a modern technical world.

Additional Information:
School district: Bethel Park School District
County: Allegheny
Grades: 7-12

Contact person: Bill B. Wolfe
Department Chairman
Bethel Park School District
335 Carlton Road
Bethel Park, Pa. 15102

READING BY A LINGUISTIC PROGRAM

Recognizing that efficiency and speed in learning to read is related to how well children understand the process of learning to read and how responsible the role they have in their own learning, the district, in 1963, piloted a new program to offer a better mastery of reading in a shorter period of time. A linguistic approach has been developed, based on Bloomfield and Barnhart's Let's Read, with many modifications to emphasize word and sentence writing, spelling, punctuation, sentence structure, skimming for meaning and independent study skills.

The program, initiated as a pilot program in one 1st grade, has been extended to all primary grades. Teachers worked as a committee to develop ideas and materials which evolved into a guide. The methods of instruction include the discovery method of learning, introduction of vocabulary in a scientifically logical order and organized into patterns, study sheet assignment, emphasis on writing and on skimming and a supplementary individualized program. As the students learn to read words, they learn to write them, spell them and use them correctly in writing sentences and stories.

Evaluation is continuous involving teacher judgment, standardized tests and records of progress. Results indicate greater student achievement and more rapid progress. Improvement is apparent in writing and study skills.

Additional Information:
School district: Bethel Park School District
County: Allegheny
Grades: K-4

Contact person: Gladys A. Eakin
Supervisor of Reading
Bethel Park School District
501 Church Road
Bethel Park, Pa. 15102

CULTURAL ENRICHMENT--TITLE I

This program was planned to meet the needs of the nonEnglish speaking students in grades 2 to 12.

In the elementary school, the nonEnglish speaking spend part time in a class planned in the development of oral skills in English and part time in the regular classroom. The nonEnglish classroom is provided with specially designed materials and equipment such as tape recorders with head sets, visual aids (pictures, picture books and bulletin board materials), filmstrip projectors and language masters. This program is to enable the nonEnglish speaking student to learn to speak and think in English and adjust to the community.

Industrial arts, homemaking and physical education are included in the program for students in the 4th, 5th and 6th grades. Weekly field trips are designed to introduce these students to the community and its services. All nonEnglish speaking students in the district's other elementary schools are assigned and transported to the center.

In the secondary school a traveling English teacher meets with the nonEnglish speaking students for a period every day.

In one of the junior high schools where the enrollment of non-English speaking students is high, a teacher aide spends the afternoon with these students to reinforce the skills taught by the traveling English teacher. This arrangement provides opportunities for small group instruction in improving facility in English.

A series of parent meetings are held in the neighborhood centers where these children live. These meetings have been successful in that they have improved relationships and have developed the understanding that the school does care what happens to its children.

Many of the students from this program have transferred to regular classes where they are now experiencing more success than they would have had without this instruction.

Additional Information:
School district: Bethlehem Area School District
County: Northampton
Grades: 2-12
Pamphlet available upon request

Contact person: William A. Schuler
Coordinator, State and Federal Projects
Education Center
1330 Church St.
Bethlehem, Pa. 18015

ENGLISH LANGUAGE DEVELOPMENT FOR NONENGLISH SPEAKING CHILDREN

An increasing number of American citizens from Puerto Rico were moving into the community of a particular school. When nonEnglish speaking children enrolled in kindergarten or 1st grade, they often learned English easily. But those who came in later were at a disadvantage and had more difficulty with the culture.

In setting up the program home visits were made by the director, the nurse and the Spanish-speaking aide. Elementary students were divided into four groups according to age and proficiency in English. Junior high students met one period daily with a traveling teacher. Special instruction in oral English activities to develop speech patterns and vocabulary were instituted. The program provides experience in home economics for upper elementary and special education girls and in vocational arts for boys. Adaptive physical education was included for public and parochial children with defects. The elementary school class is in a regular school and the children spend three-fourths of the day in a regular classroom with age-peers.

In addition to the primary goal of helping the nonEnglish speaking child to develop proficiency in oral English, the program aims to provide successful transition to regular classroom activities; to provide special areas of instruction where knowledge of English is not needed, so that the students will perceive school as a place they can succeed; to remedy physical disabilities when possible and to work with parents to improve relationships and to develop understanding of the school's concern for their children.

Additional Information:
School district: Bethlehem Area School District
County: Northampton
Grades: 2-12

Contact person: William A. Schuler
Coordinator, State and Federal Projects
Education Center
1330 Church St.
Bethlehem, Pa. 18015

ITA READING AND LANGUAGE ARTS

An idea planted at a university seminar focused the attention of this district on the difficulties provided by irregularities of traditional orthography for the beginning reader and on the difficulty of providing children with a language arts curriculum which took advantage of the oral language development of beginners.

The ITA program provides an augmented alphabet with almost a perfect one-to-one relationship between the 40 sounds of English. Once the child has learned to blend the sounds represented by symbols into words, he is released to read and write easily. The oral language with which he comes to school is the basis for expanding his writing and reading skills. Transition to traditional print and spelling is an integral part of instruction in 1st grade for able and average learners.

Objectives of this reading approach are to provide a logical, successful introduction to reading and writing, to eliminate as much as possible reading disability in later grades and to introduce children early to a wealth and variety of literature

Additional Information:
School district: Bethlehem Area School District
County: Northampton
Grades: 1-6
Pamphlet available upon request

Contact person: Rebecca W. Stewart
Assistant to the Superintendent for Elementary Education
Bethlehem Area School District
1330 Church St.
Bethlehem, Pa. 18015

KITS FOR SCIENCE-KEYS FOR INTERDISCIPLINARY TUTORIAL STUDY

The science education staff representing a number of regional school districts are involved in developing the master plan, schedule of activities and responsibilities. Chief school administrators of the region participated in the selection of the 52 K-12 teachers from the seven-county region.

The Authority-Teacher Dialogue Seminar, a three-credit Saturday graduate course at Lehigh University, presented 12 interdisciplinary topics. The seminar consisted of a one-hour authority presentation, one hour small group discussion with science education specialist and one hour teacher-authority question and answer discussion. A similar procedure was used at the week-long NASA Goddard Space Flight Center Aerospace Institute at Greenbelt, Maryland.

The staff prepared individualized materials for each teacher participant in the areas of science teaching-learning, behavioral objectives, conceptual structures and individualized learning. The staff developed an interdisciplinary science library of science reference and educational methodology materials along with multi-media.

The supplementary science activities workshop was a full day five-week three-credit graduate course at Lehigh University, held at East Hills Junior High School. The development of curricular materials was achieved by teacher direction to center on structural and behavioral patterns of the universal environment. Teachers devised sets of activities organized about a natural, social and technological emphasis, all directed toward the thermal equilibrium theme with a physical, earth, life or space science bias.

All presentations and dialogue were recorded and are in the process of transcription that will produce an interdisciplinary science approach source to be distributed regionally and nationally.

Additional Information:
School district: Bethlehem Area School District
County: Northampton
Grades: K-12
Pamphlet available upon request

Contact person: Stephen Rituper Jr.
Curriculum Coordinator
Education Center
Bethlehem Area School District
1330 Church St.
Bethlehem, Pa. 18015

FRENCH--GRADES 2-12

A desire to have students gain some real competence in the areas of language skills by a long exposure to the languages prompted the institution of French from 2nd grade through 12th grade. The district felt that students in elementary grades could more easily learn good speech habits and automatic control of the language than older students.

The program was set up with the object of giving students skill in understanding the foreign language as well as reading and writing it, of increasing their skill in all four areas by making a long sequence of study available and of enabling students entering college to be prepared for language study at the college level. Tapes, records and conversation and dialogue are used at all levels. At early levels, the instructors carefully control reading and writing. Individual reading and oral reports are assigned at higher levels. At all levels, the instructors insist upon correct pronunciation and intonation and the use of the language as the medium of instruction.

Additional Information:
School district: Big Beaver Falls Area School District
County: Beaver
Grades: 2-12

Contact person: William A. Smith
Curriculum Coordinator
Thirty-eighth Street School
Big Beaver Falls Area School District
Thirty-eighth and Third Avenue
Beaver Falls, Pa. 15010

Marian H. Starr
Chairman, Foreign Language Department
Big Beaver Falls Area School District
Sixteenth Street and Eighth Avenue
Beaver Falls, Pa. 15010

READING--GRADES 1-6

Feeling the inadequacy of remedial reading, which isolated the child from the classroom environment, the district initiated an in-class reading consultant program in 1969-70. This provided a complete supplementary reading service to teachers and students. Reading consultants worked with teachers to diagnose areas of difficulty, and then appropriate materials were brought into the classroom by the reading specialist. Specialists worked with the teacher using the new materials until the teacher and class were able to use the materials on their own, until they were able to keep their own records and work independently or in small groups. The program was so successful its first year, it has been enlarged and continued. The overall effect is a revitalization of the reading program, continuous in-class in-service education; spin off has been individualization of instruction in more areas than reading.

Additional Information:
School district: Big Beaver Falls Area School District
County: Beaver
Grades: 1-6

Contact person: Judith R. Jarett
Director, Reading K-12
Thirty-eighth Street School
Big Beaver Falls Area School District
Beaver Falls, Pa. 15010

William A. Smith
Curriculum Coordinator
Thirty-eighth Street School
Big Beaver Falls Area School District
Thirty-eighth Street and Third Avenue
Beaver Falls, Pa. 15010

READING--GRADES 7-12

Out of hours reading classes are held one night a week for students in grades 7 through 12 who wish to improve their reading skills. Students from all academic levels are accepted for either remediation or development of specific skill areas in reading.

Reading specialists test students at the onset of instruction, design programs to meet specific goals and then provide the materials to meet these needs. Approximately four instructional sequences are in operation during each segment of instruction.

Following instruction at mid year, and at the end of the year, students are retested and apprised of their progress. Students are encouraged to make realistic self appraisals, and independent extensions of the program are encouraged.

Additional Information:
School district: Big Beaver Falls Area School District
County: Beaver
Grades: 7-12

Contact person: Judith R. Jarett
Director, Reading K-12
Thirty-eighth Street School
Big Beaver Falls Area School District
Beaver Falls, Pa. 15010

William A. Smith
Curriculum Coordinator
Thirty-eighth Street School
Thirty-eighth Street and Third Avenue
Beaver Falls, Pa. 15010

READING--PHONICS

In January 1969 the Big Beaver Falls Area School District initiated the use of Alpha One in their kindergarten classes. This is a phonics program, developed with fantasy characters for each letter sound. No paper work was used in the kindergarten classes.

Art lessons were developed to go with each letter of the alphabet. The lessons were designed to develop perceptual awareness and perceptual skills, as well as to reinforce the individual phonic sounds. The program worked so well in kindergarten, it was carried on into the 1st grades in 1970, using the workbooks and accompanying worksheets. The kindergarten work with the program has been incorporated into the regular program of studies beginning in January or, in some cases, after Thanksgiving. First grade teachers are emphatic in their endorsement of kindergarten use of Alpha One. They note much better phonic readiness.

Additional Information:
School district: Big Beaver Falls Area School District
County: Beaver
Grades: 1-6

Contact person: Judith R. Jarett
Director, Reading K-12
Thirty-eighth Street School
Big Beaver Falls Area School District
Beaver Falls, Pa. 15010

William A. Smith
Curriculum Coordinator
Thirty-eighth Street School
Thirty-eighth and Third Avenue
Big Beaver Falls Area School District
Beaver Falls, Pa. 15010

SPANISH--GRADES 8-12

A desire to have students become fluent in the use of a second language led the school district to adopt five years of Spanish in the secondary school with emphasis on achievement levels rather than grade level.

Added to an existing program that makes it possible for a student to be exposed to French for 11 years, the five-year Spanish program was instituted to broaden the cultural view of the students, to increase students' skills in the use of the language and to enable students to enter college prepared for advanced classes.

The program makes use of tapes, records and slides. Instructors aim for controlled reading of literature, individual reading and oral reports and insistence on correct pronunciation. One teacher only is teaching at each level and selects texts and program plan.

All students are eligible to begin the program, but they must maintain a "C" average to advance to the next level. Many students are majoring in Spanish. Many who took placement tests in college have been assigned to advanced classes or are exempt from taking the course.

Additional Information:
School district: Big Beaver Falls Area School District
County: Beaver
Grades: 8-12 and adult

Contact person: William A. Smith
Curriculum Coordinator
Thirty-eighth Street School
Big Beaver Falls Area School District
Thirty-eighth Street and Third Avenue
Beaver Falls, Pa. 15010

Richard K. Evans
Spanish Teacher
Big Beaver Falls Area School District
Sixteenth Street and Eighth Avenue
Beaver Falls, Pa. 15010

MIDDLE SCHOOL INDUSTRIAL ARTS

The school, designed by the administration and faculty, was completed by September 1970.

The major objectives of the industrial arts program are:

1. To help students develop problem-solving techniques and abilities through a variety of learning experiences.

2. To help students gain an understanding of technology, its involvement with people, its products and services and its manufacturing and production processes.

The program includes the concepts of team teaching, large group instruction and extensive use of various educational media. Exploratory activities are geared to the new plan for industrial arts education in Pennsylvania called "seeds for progress" (Selective Educational Experiences Diagrammed). Also included are exploratory activities in most of the courses offered by the two new Schuylkill County Area Vocational-Technical schools.

Courses provide for flexibility in curriculum, facilities and supervision. An attempt is being made to reflect technology realistically. The units of study are based on the major divisions of industry such as manufacturing, construction, communications, transportation and power. Most of the interior walls are movable to meet the needs of a variety of teaching methods and student activities. There is a correlation between the industrial arts program and other subject areas.

Equipment is replaced by self-instructional training equipment as it becomes available. Other features of the laboratory layout include photographic darkroom, study carrels and overhead storage.

Additional Information:
School district: Blue Mountain School District
County: Schuylkill
Grades: 6-8

Contact person: Charles W. Bohr
Industrial Arts Instructor
Blue Mountain Middle School
Red Dale Road
Orwigsburg, Pa. 17961

TOTAL GROWTH VIA THE MIDDLE SCHOOL

The maximum total growth of the preteen in grades 6, 7 and 8 is the basic objective of the Blue Mountain Middle School which was completed in September 1970. This age represents a district group insofar as social, educational and physical growth are concerned.

To achieve this major objective, a curriculum has been developed which includes survey as well as terminal courses. These courses are integrated within a school. In each of these separate schools, instructional areas have movable walls to separate various learning activities as needed. Students in each of these separate schools are grouped homogeneously by individual course to utilize team teaching, large and small group instruction as well as permitting students to work on an individual basis in areas of interest for enrichment or acceleration. Students and teachers have at their disposal audio-visual equipment such as closed circuit television, video tape equipment, tape recorders, electrified study carrels and educational television. Teacher planning areas as well as multi-purpose conference areas are included in each instructional area.

The end result is a 12-month program involving both students and parents in day and evening activities to foster the student's total growth. The program involves not only the student and parents, but also includes all adults in the district by creating a recreational as well as educational plaza.

Educational involvement is by citizens committees and parental conferences. Recreational involvement includes an all year indoor-outdoor natatorium as well as other recreational facilities.

Additional Information:
School district: Blue Mountain School District
County: Schuylkill
Grades: 6-8

Contact person: Theodore J. Catranis
Middle School Principal
Blue Mountain Middle School
Red Dale Road
Orwigsburg, Pa. 17961

ENRICHMENT READING

The Boyertown Area Junior High School English department instituted a new program for book reports at the beginning of the 1970-71 school year. Students in the junior high school each received an "enrichment reading list," which consisted of approximately 500 book titles. The list was broken down into the following categories: very difficult, difficult, 8th grade, 7th grade and easy.

The English department purchased 50 question objective tests from the Perfection Form Company on these books. An answer key also came with the tests. The English teachers set their own requirements with their classes. However, all students were encouraged to fulfill some of their book report requirements by taking tests which were listed on the "enrichment list." In addition, the English teachers also required at least one oral book report and one written report.

Reading experts have always maintained that the worst thing teachers can do is make students write about a book they have read. This process does little to motivate reading and stifles the students' desire to read more and better books.

Through this new procedure, the English teachers at Boyertown Area Junior High School and the school librarian have noticed that students are reading books which have greater intrinsic value. In addition, there is definite evidence that they are reading the books thoroughly and absorbing the content to a greater degree. Heretofore, many students have read the books only partially and also were selecting the "easier to read" books in the library.

In order to increase the number of books on the "enrichment list," each English teacher has taken the responsibility of reading 12 to 15 books a year and making objective tests on them. In this way we will be able to expand the number of books on the list and also add books for the student who is reading below grade level and cannot handle many of the books on the current list.

Additional Information:
School district: Boyertown Area School District
County: Berks
Grades: 7-9

Contact person: John J. Spleen Jr.
Boyertown Area Junior High School
Boyertown Area School District
South Madison Street
Boyertown, Pa. 19512

LEARNING MATERIALS CENTER

A program that was innovative in its initial inception under ESEA Title I funding has now become an integral part of the total curricular structure using only local funds supplemented with Title II. The learning materials center concept in the Brookville Area School District, which began in January 1966, is now operative at both elementary and secondary levels with one center serving K-6 and another 7-12. Centralized ordering, cataloging and processing is done at the secondary business office of the learning materials center. In addition to printed materials, both centers house and circulate audio-visual materials such as filmstrips, tape and disk recordings, 8 mm loop film, multi-media kits, slides, games, mounted pictures and study prints. Equipment for using these materials is supplied in listening and viewing areas in the learning materials centers.

The librarians are not responsible for supplying hardware to teachers or maintaining equipment. At the secondary school, a separate audio-visual suite containing a closed circuit television studio provides storage for portable equipment, charts, maps, transparencies and slides. The staff maintains all building audio-visual equipment and circulates it to classrooms on request. The district belongs to a Regional Instructional Materials Center which supplies 16 mm film and other supplementary audio-visual media.

An elementary nonrestrictive 36-room carpeted building has a specially designed openspace air-conditioned learning materials center that functions teaching/learning process. They visit classrooms for book talks and introductions of units. Classes come to the learning materials center for research, listening and viewing. The reorganization from the traditional library has increased the use of facilities by students and resulted in more teacher-librarian planning. Enthusiasm for use of audio-visual materials has been contagious with the result that all teachers and students have been affected by the new media and additional services of the increased library staff.

Additional Information:
School district: Brookville Area School District
County: Jefferson
Grades: K-12

Contact person: Frances M. Benninger
Coordinator of Library Services
Brookville Area School District
Brookville, Pa. 15825

ECOLOGY CAMP FOR DISADVANTAGED ELEMENTARY CHILDREN

Realizing that a closer relationship between teacher and student is desirable and that a better understanding of our environmental problems is necessary if the human race is to survive, the Brownsville Area School District has instituted a resident environmental science camp school.

The aims of the camp school are to make the students aware of their social and moral obligations to themselves, their peers and their elders and to make them aware of the environmental problems facing the human race. Sixth grade students have been chosen to attend the camp because it is felt that their age is more receptive to the ideas being presented in the camp school curriculum.

Camp T. Frank Soles, Young Men's Christian Association camp in Somerset County, Pa., was chosen as the site for the camp school because of its physical plant and its natural surroundings. A camp director and teaching staff were chosen from the elementary and secondary teaching staff employed by the school district and a period of intensive in-service training was presented to them.

The students are residents of the camp for one week. The program design meets the needs of the pupils--all areas of development consistent with the goals established. Pre and postcamp attitude tests were administered to the students as a means of evaluating the camp program.

The idea was well received by students, parents and community leaders and the evaluation indicates a successful achievement of the stated goals.

Additional Information:
School district: Brownsville Area School District
County: Fayette
Grades: 6

Contact person: Mr. Harold Seaton
Brownsville Area School District
Republic, Pa. 15475

VOCATIONAL AND PERSONAL GUIDANCE SERVICES FOR THE MENTALLY RETARDED

The traditional academic nature of special classes for the retarded did not seem to motivate or meet the needs for success on the job at post-school level. To fill a need of these students for information about occupations, guidance into vocations and ability to make good personal, social and emotional adjustments to a job, a special county guidance program was established.

Aims of the program are to develop specific techniques of guidance for the mentally limited, to provide them with individual and group guidance, to guide them toward a more realistic view of the world of work, to provide vocational guidance, to establish an on-the-job training program and placement service for graduates and to provide continuous guidance from the classroom into the world of work.

To fulfill the objectives, the program has moved into the areas of individual counseling of students with special problems and weekly group guidance classes in the secondary special education program provides the student with the needed information to seek employment. A follow-up guidance service has been provided. The guidance counselor also handles referrals to any community agency that will supply further training for the exceptional student.

Results have shown better adjustment and better attitudes and work skills. Follow-up studies over the past five years indicate an average of 11 per cent of students not employed.

Additional Information:
School district: Cambria County Board of School Directors
County: Cambria
Grades: 7-12
Pamphlet available upon request

Contact person: John J. Pastovic
Supervisor, Special Education
Appalachia Intermediate Unit
Courthouse Annex
Ebensburg, Pa. 15931

ADVANCED TOPICS IN PHYSICAL SCIENCE

The growing need for a course beyond the usual high school science courses for the well-above average student who is considering a career in science provided the impetus for the establishment of this course entitled Advanced Topics in Physical Science.

Topics studied throughout the year include the history and philosophy of science, Einstein's special theory of relativity, atomic physics, spectrophotometry, quantum mechanics, nuclear physics and thermodynamics.

Students in the course also pursue a major research project throughout the year and present a progress report on their research to the group four times during the year.

In order to elect the course, each student must have taken at least one course in each of the sciences--biology, chemistry and physics. Superior work in these prerequisites is recommended for success in the course.

A team of three science teachers provides not only the instruction in the course, but also serves as advisers for the research projects.

Additional Information:
School district: Carlisle Area School District
County: Cumberland
Grades: 11 -12

Contact persons: Kenneth Egolf, Leon Kauffman, Leon Zeiders
Advanced Topics in Physical Science Team
Carlisle Area School District
West Penn and Orange streets
Carlisle, Pa. 17013

ENGLISH: PHASED ELECTIVES

A phased elective program is available to students in grades 11 and 12. In this program students choose courses that meet their needs and are on a level of difficulty most suitable to their abilities. In Carlisle's phased elective English program, courses will be offered on five levels of difficulty. From these courses or from a group of nonleveled courses, students will choose three 12-week courses for their junior year and three for their senior year.

The Carlisle Area School District believes that a phased elective program has several distinct advantages. First, it makes it possible for students to choose a level of work that will stimulate and enable them to perform successfully. Second, it allows parents and students to have much greater control over a student's program, and they can alter it to meet their educational philosophy. Third, it enables students to enroll in classes that interest and meet their needs. Fourth, it permits teachers to teach in the areas in which they are best trained. Fifth, it enables the school to adjust class size according to the nature of the course.

Additional Information:
School district: Carlisle Area School District
County: Cumberland
Grades: 11-12

Contact person: Dilys Schuettler
Chairman, English Department
Carlisle Area School District
723 W. Penn St.
Carlisle, Pa. 17013

MINI-COURSES

During the 1969-70 school year, the Carlisle Senior High School initiated a cooperative study hall program in which students were given the options of reporting to a quiet study area, to the library or to a cooperative study area during study hall periods. Utilizing existing teacher personnel and facilities to bring about increased teacher-student interaction, the senior high school during the 1970-71 school year created a program of mini-courses designed to assist students in three major areas. The mini-courses are defined as planned programs initiated by teachers or students during periods in which both would normally have study halls. The course content encompasses three possible areas of interaction: academic enrichment, academic developmental and personal-social developmental. In the academic enrichment area courses such as Russian culture, the library as a research center, horticulture and introduction to Greek were offered. In the academic developmental disciplines courses such as remedial algebra and developmental Biology II were offered. In the personal-social developmental area courses such as group counseling, drug rap, athletic trainer, "Is crime a problem?" and personal typing were offered.

All courses are nongraded with the teachers and students mutually determining the length of the course. Election into a mini-course is purely on the basis of student interest in that particular area. Students who find that the mini-course they have selected is not what they want may return to the cooperative study area. The added dimension of mini-courses provides an opportunity for discussion in interest areas apart from the normal pressures of tests, grades and credits. The courses approach, on a small scale, the interests of today's students with values of genuine interest, creativity, innovation and, above all, learning for the sake of learning itself.

Additional Information:
School district: Carlisle Area School District
County: Cumberland
Grades: 11-12

Contact person: J. Wesley James
Guidance Counselor
Carlisle Area School District
723 W. Penn St.
Carlisle, Pa. 17013

READING LABORATORY

In this junior high school program (grades 7 and 8), individualized instruction serves as the basis for both developmental and remedial reading classes. In each class, students work simultaneously and independently in areas such as vocabulary development, comprehension, word analysis and reading rate. A team of four teachers utilizes four rooms. Three rooms have individual learning stations and the fourth room is a conventional classroom. The three laboratories are equipped with controlled readers, vision testers, eye-hand coordinators, tachistoscopes, skimmers, tape recorders, filmstrip projectors and reading accelerators. Materials used in this program include Addison-Wesley Kits A and B, SRA reading laboratory and Reading for Understanding kits, extensive paperback libraries, plays and periodicals and various teacher-made materials. The lessons made by the instructor relate to other language arts experiences such as analogous relationships, descriptive language, homonyms and other specific areas of reading development. Dependent upon the need, students are scheduled into these reading classes for 1 to 3 periods per week.

Additional Information:
School district: Carlisle Area School District
County: Cumberland
Grades: 7-8

Contact person: Robert Over
Reading Department
Lamberton Junior High School
Carlisle Area School District
Carlisle, Pa. 17013

CLERICAL PRACTICE AND GRAPHIC ARTS COOPERATIVE PROGRAM

When covering the unit on duplication, the lack of offset duplicating equipment does not hinder us from covering that phase of reproduction.

The clerical practice students are assigned a problem to type on an offset master. To emphasize the quality of the results that can be obtained from their masters, some students are assigned typewriters with carbon ribbons, others with a new cloth ribbon, and others with worn-out ribbons. The color of the offset eraser seems to make a difference. The white colored eraser corrects errors more satisfactorily than the red colored eraser.

After the masters are typed, the students visit the graphic arts department and the instructor explains the offset duplicating process to the class. The operation of the offset press is then demonstrated using selected masters that the class had typed. Now, the students could see that the carbon ribbon produced the best results, with the new ribbon coming in second, while the results from the old ribbon were not satisfactory.

As they have never had the occasion to see what goes on inside the print shop, the students enjoy the experience.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 11-12

Contact person: Marcella Brady
Business Education Teacher
William Tennent High School
Centennial School District
Warminster, Pa. 18974

COMPARATIVE ECONOMICS SYSTEMS

The study of Communism is accepted today as necessary to understand the "Cold War." Communism versus Democracy is widely studied and Communism, Fascism and Socialism as economic systems with deep political implications are not as prevalent as they should be.

Democratic Capitalism is presented and studied based on 12 basic economic questions. While Capitalism is being studied, students are studying their chosen ideology subjecting their self-study and analysis to the same basic questions and, where suitable, to the basic outline. Students may work in committees of not more than four members or may work independently. There should be a continuing comparative study procedure.

At the conclusion of the studies, the best informed student of each "ism" is chosen to present a constructive speech presenting his or her "ism" to its best advantage. There is a three-way cross examination after which the audience is given time for questions. Half truths and trickery will not be tolerated. Finally, each "ism" is subjected to the initial 12 basic economic questions.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 10-12

Contact person: Ella Rhoads
Social Studies Master Teacher
William Tennent High School
Centennial School District
Newtown Road
Warminster, Pa. 18974

COMPUTER SCHEDULING

The high school uses a large digital computer (IBM 7090 or IBM 7094) each year to build its master schedule. The program used to accomplish this is titled "generalized academic simulation programs." It produces a schedule which takes into account circumstances and innovations peculiar to the school, such as:

1. Independent study in English, language, mathematics and industrial arts.
2. Ability groupings: five in mathematics, four in both English and social studies and two in science.
3. Wide ranging electives. (The school has 212 course offerings for 2,300 students.)
4. Team teaching in English, social studies and mathematics.
5. Four exploratory shop programs which meet at the same time so that students can rotate from one shop to the next during the school year.
6. Dovetailing of reading, health and physical education programs, each of which meets two times per week.
7. Meshing regular courses, special courses and work experience for occupational students.

The computer constructs a master timetable subject, assigning teacher schedules, student schedules and room schedules. It forms class lists and descriptive materials such as student and timetable analysis reports, teacher and room utilization reports and histograms describing per cent of students or teachers available in any grouping and period who have been scheduled.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 9-12
Pamphlet available upon request

Contact person: Liam O'Dwyer
Assistant Principal
Centennial School District
Newtown and Street roads
Warminster, Pa. 18974

CONSUMER EDUCATION--HOME

Many of the social and economic problems of society today are caused by the disintegration of the family unit and poor financial management. Despite this obvious fact, it is highly probable that a student may complete four years of high school education with little or no exposure to the areas of home management and financial responsibility. With present educational specialization, students who select college preparatory, industrial arts or certain areas of vocational training fall into this category. Male students who must bear much of the financial responsibility of family life certainly need instruction in these areas.

Objectives

1. To provide students in grades 9 and 10, male and female, with a comprehensive educational program in the areas of home management and financial responsibility.
2. To inculcate in each student a respect for the American economy system and to establish insight into its operation and role of individual within its framework.
3. To develop self-respect through knowledge, particularly in those students who come from the lower socioeconomic levels; to give them confidence by information gained of family living through home management and consumer education.

The course is designed to give vital information in the areas of purchasing, credit, budgeting, advertising, banking and insurance.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 9 and 10

Contact person: Marjorie Bigelow
Log College Junior High School
Centennial School District
Newtown Road
Warminster, Pa. 18974

CONTEMPORARY HISTORY AND THE CARTOON

Cartoons deserve more than a knowing nod or a smile. The political cartoon is a commentary unique in itself. Cartooning has played a special role in the history of the United States. It is playing a significant role in contemporary history.

The cartoon is used in a variety of ways. For example: cartoons are used as review lessons, subjects for essay, tests for interpretations and round-table discussions. Bulletin board displays signifying current concepts and areas being studied is another use.

Cartoons may serve as a means of evaluation by deleting the captions of each cartoon, numbering them and then assigning the appropriate caption to be filled in by the student.

A news file concentrating on a contemporary subject area or a current concept (poverty, welfare, civil rights) may be a selection of cartoons only filed under source and date plus written interpretations. This assignment is an exciting and creative endeavor.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 10-12

Contact person: Ralston Jones
Social Studies Teacher
William Tennent High School
Centennial School District
Warminster, Pa. 18974

CREATIVITY

The release and development of creative behavior has been the goal of experimental learning activities in the Centennial elementary schools. Participation by teachers is on a volunteer or request basis. Many of the activities are based on the belief that visual perception is an extremely important tool in many kinds of creative endeavors and expressions. Slides, 8mm motion pictures, overhead projection transparencies and paper-pencil exercises have been produced which seem to elicit creative responses from most children exposed to them.

An assumption is made that creativity can foster creativity That is, exposure to the creative output of others can trigger creative behavior. Carefully selected slides of paintings, sculpture and architecture are being used toward this end.

Creative activity often requires the use of materials, processes and tools. A recent addition to the elementary school staff is an industrial arts specialist. Equipment and materials are provided to make technology a creative tool for the students. Industrial arts projects have been designed which should stimulate creative thinking.

Creativity may be linked to "idea." A library of visual and printed resources which may be used to explore ideas with students is being developed. The "idea" of art, family, city and many other major dimensions of humanity can be made available to students in the classroom through recordings and visual materials. These provide springboards for discussion and personal creative expression.

The above description presents a sampling of ideas and activities toward helping students achieve some of their creative potential.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: K-12

Contact person: Henry W. Ray
Director, Teaching/Learning Resources
McDonald Elementary School
Centennial School District
Warminster, Pa. 18974

EDITORIAL OPINION AND CONTEMPORARY HISTORY

Editorials and columns often include more news, more facts, more answers to historical questions--who, what, when, where, why--than many news reports. The facts are often more clearly stated and more readily discernible. The editorial is used to find the answers to historical questions. Discussion of the writer's opinion and the basis for that opinion is pursued.

Students write their own editorials on exciting and lively topics before the editorials of experts are read. This assignment creates a great deal of interest. Students are often gratified by their thinking over against the thinking of the experts.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 10-12

Contact person: Ralston Jones
Social Studies Teacher
William Tennent High School
Centennial School District
Warminster, Pa. 18974

EDUCATIONAL PROGRAM FOR PUERTO RICAN CHILDREN

Centennial schools provide a program for teaching English as a second language to Puerto Rican children, many of whom have migratory status. Although great emphasis is placed on the necessity of learning English, instruction is also given in Spanish.

The program provides a bilingual experience in learning that capitalizes upon the individual enrollee's language dominance and skills, emphasizing the values of bilingualism and providing an individualized, prescribed curriculum which is responsive to the specific needs of each enrollee. Recognition is given to the values of the Puerto Rican culture through regular, recreational, social and educational activities which will be largely determined by the interests and motivations of the participants. Bilingual volunteers are used working with all age levels. A heavy concentration of language stimulating and enriching experiences are provided. Comprehensive social and welfare services to people of all ages in the Spanish-speaking community are provided by a Spanish-speaking social worker. The services of a Spanish-speaking psychiatrist and psychologist are used regularly for diagnostic purposes.

Articulation of program is achieved through the use of a team which is composed of all teachers (4 full-time and 2 part-time) assigned to the Puerto Rican children at all levels. The team is coordinated with the Director of Social Services in the pupil services office. Regular team conferences and outside consultation from the Educational Development Center, Department of Education, provide the means for continuous evaluation of the program.

Title I ESEA funds and local school district funds finance the program.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: Nursery through 12

Contact person: Betty K. Mellor
Director of Social Services
Centennial School District
Craven Hall
Warminster, Pa. 18974

ELEMENTARY SWIMMING PROGRAM

During this current school year (1970-71) Centennial has a program in instructional swimming for 1st and 4th grade children. There is a pool in the Everett A. McDonald Elementary School designed specifically to teach young children how to swim. The pool is 50 feet by 50 feet and ranges in depth from two to five feet. The program is offered to all 1st graders and 4th graders in the district, which totals about 2,000 and they are brought to the pool twice a week for a 12-week period of instruction.

The basic philosophy is to have each pupil in the district have the opportunity to receive swimming instruction and water safety as part of the physical education program. Instructors let children progress as far as they are capable during the period of instruction. The pool is also used by specialized groups in the building such as the trainable and the physically handicapped. Hopefully, the program will be expanded to include other grade levels in the future.

Centennial has a pool in each of its junior high schools and a pool is anticipated in a new senior high school. With these additions it should give Centennial a comprehensive swimming program for grades 1-12.

Additional Information:
School district: Centennial School District
County: Bucks
Grade: 1 and 4

Contact person: Charles R. Walker
Assistant Superintendent for Elementary Education
Centennial School District
Reeves Lane
Warminster, Pa. 18974

HIGH SCHOOL PSYCHOLOGY PROGRAM

This course has two directions. One is to acquaint the students with the past, the other to prepare them for the present and the future. The former provides a broad, basic exposure to psychology in a general or historical sense. The latter develops in the students the ability to recognize and understand the complex aspects of human interaction, enabling them to utilize the adjustive mechanisms necessary for a successful social life.

An experimental approach is used whenever and wherever possible. The entire methodology of the course is governed by this approach. Students who can't work well with their heads are expected to try working with their hands, their feet, their faces or whatever they can use to the best advantage. A large part of the laboratory equipment now in use in this course was made by the students themselves.

Direct contact with problem areas is given great emphasis and always gets priority over classroom presentations. Visits to prisons, mental hospitals, "new concept" school systems, homes for emotionally disturbed children and private rest homes are part of the field trip program every year.

New concepts in psychology are made part of the curriculum by means of a file in which clippings from journals, magazines and newspapers are kept in appropriately labeled folders and discussed in the group. This brings molecular basis of thought, extrasensory perception, chemical schizophrenia and many other advanced concepts into the classroom.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 10-12

Contact person: Ulysses Biffoni
Phschology Teacher
William Tennent High School
Centennial School District
Newtown Road
Warminster, Pa. 18974

INDEPENDENT STUDY IN CHEMISTRY

Because of misgivings as to the effectiveness of present educational practices in chemistry, the introduction of an independent study program appeared to be desirable. The objective was to find a method of instruction by which teachers could teach less, but learners would learn more. The independent study chemistry program was designed to permit students to study chemistry independently with the direction and advice of the teacher only as needed.

The program was founded on two basic assumptions:

1. Learning results only from the students own efforts.

2. Learning how to learn is the primary ingredient of an education.

The program was designed to remove the teacher from the role as the middleman between the students and their education and to emphasize what the students do.

The independent study program in chemistry at William Tennent High School uses the CHEMS materials as a basis for the course. The content of the material was analyzed and stated as behavioral objectives. These objectives are used to direct the students to the tasks that they must accomplish. Assignment sheets further aid the student in accomplishing the stated objectives. Many of the objectives have multiple ways of achieving the behavior, and optional objectives are included for interest and enrichment. Supplementary and practice materials in the form of programs and worksheets are available to evaluate the student's performance. The test items fit the prescription in the objectives. For any objective, a large number of different but equally appropriate criterion test items were written. These tests are administered to the students on an individual basis when the students feel that they are ready to demonstrate their competency. Students work at their own pace to complete their study of the relevant topics and finish their laboratory work, but never at a pace less than a minimum standard set by the teacher.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 10-12

Contact person: Carole Koenig
Cemistry Teacher
William Tennent High School
Centennial School District
Warminster, Pa. 18974

AN INDEPENDENT STUDY PROGRAM IN LOCAL GOVERNMENT

An internship program in local government has been developed for students planning a career in politics or government or who display exceptional interest and enthusiasm in the study of political science. Students are selected on the basis of combined individual interest and teacher recommendation.

After the student interns research the necessary background information relative to their assignment, appointments are made with the appropriate governmental officials who sponsor the visits to various offices and agencies. Students are released from school for one or more days per week depending on the nature of visitation or assignment.

Contacts are made with school administration, parents of the students, teachers and government officials in order to organize the program. To date, all interested parties have shown great interest and cooperation with the program. Since William Tennent High School is located in Warminster, a special interest is shown in the organization and operation of townships of the second class.

A typical sequence of weekly assignments is illustrated:

1st Week	Township manager's office a. Housing officer b. Zoning officer c. Building inspector d. Road maintenance foreman
2nd Week	Municipal authority (water and sewer)
3rd Week	Police department
4th Week	District justice of the peace
5th Week	School district administration
6th Week	Visit to a township of First Class
7th Week	Visit to a borough
8th Week	Philadelphia (City of First Class)
9th Week	Visit to Bucks County row offices
10th Week	Visit to Bucks County District Attorney's office and courts

In addition to their background research, participating students prepare a journal, summary report and evaluation of this special assignment. Their reports indicate that they regard this project a valuable learning experience which is interesting, informative and thought provoking.

Plans are being developed to expand the local government internship program into one involving government at state and national levels as well. Visits are planned to include the Pennsylvania State Capitol to observe various executive offices, the State Legislature and the Commonwealth court in Philadelphia, the New Jersey State Capitol, U. S. Capitol and the United Nations.

AN INDEPENDENT STUDY PROGRAM IN LOCAL GOVERNMENT (Cont'd.)

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 10-12

Contact person: Frank Swider
Social Studies Teacher
William Tennent High School
Centennial School District
Warminster, Pa. 18975

AN INDIVIDUALIZED LEARNING APPROACH TO ENGLISH

Concerned with the increasing impersonality in the English class because of the growing student population and disturbed by the lack of pertinent available materials, three English teachers developed a program of individualized study in the English classroom.

The theme of the unit for eight weeks was "man's estrangement from nature, his society and himself; in a word--alienation." Gathering as much material as possible related to this theme from the library, the classroom anthology and personal libraries, the teachers created worksheets on such material as The Stranger and Don Quixote, short stories, plays, poetry, television shows, records, articles, etc. Each worksheet, a basic lesson plan, has the following format:

I. OBJECTIVE: An objective, easily recognizable and hopefully meaningful to the student.

II. DIRECTIONS: The literature, television show or idea to be studied and how to go about it.

III. EVALUATION: The basis on which evaluation will take place; i.e., a paper, discussion, presentation or project.

IV. REEVALUATION: Recommendations for reevaluation in the case of inadequacy (eliminates failure).

V. BLOCK-BUSTING BROWNIE BEAUTS or HARD THINGS TO DO FOR EXTRA CREDIT: An opportunity for extra credit.

The worksheet is assigned a point value based on the estimated number of class periods it takes to complete. Every student is required to do the first two worksheets designed to start the unit. Thereafter, all worksheets are fair game. The basic conditions imposed were (1) a worksheet must be complete and correct before the point value of the sheet is credited and (2) a minimum number of class periods must have been completed.

How to grade? To relieve the student of a constant grade pressure, no work is graded, it is only corrected. All corrections are discussed individually with the writer.

Two adjacent rooms were arranged to provide for activity and concentrated quiet. One room is designated for quiet reading and writing only. All discussion, operation of audio-visual equipment and general noise is confined to the activity room. Both students and teachers can move freely from room to room. One teacher is in each room except for the two periods a day when three can team. Each room has a specific seating arrangement despite end of day appearances.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 11-12

Contact person: John Lacy
English Master Teacher
William Tennent High School
Centennial School District
Newtown Road
Warminster, Pa. 18974

INVOLVEMENT DAY

Student involvement, long discussed and labored over, was given new emphasis at William Tennent High School in a unique program that suspended the regular school day and gave the students the opportunity to attend seminars on a variety of subjects conducted by a variety of discussion leaders. The word variety should not be taken lightly: speakers ranged from straight types like the superintendent of schools and members of the township committee to such esoterica as a self-proclaimed believer in the Satanic rite. Along the way were representatives of the theatrical profession, priests and ministers, Black Panthers, reformed drug-addicts, spokesmen for the John Birch Society and members of the Society of Krishna Consciousness.

Students were completely free to choose the group they wished to attend. There was no presignup. Each guest was squired about by a student and teacher host team. A few teachers were assigned to see that students got into a group, any group, promptly. There were three seminar periods of about an hour and one-half duration, two before lunch and one after.

The first involvement day enlisted the aid of some 50 guests, selected by a student-administration committee. As could be expected some guests proved to be better draw than others, but this contingency had been explained to them in advance.

An official explanation of the program contained such resounding phrases as "designed to humanize education, to encourage planning and development of relevant topics as suggested by students, to explore new topics not yet in the formal curriculum."

Unofficially, the day--and the subsequent ones--proved to be resoundingly successful. For once, school was different. Students had different things to argue about. There has been some evidence, in planning new courses, that students have been "provided with common experiences from interaction and dialogue on a schoolwide basis."

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 10-12

Contact person: John Rittenmeyer
Assistant Principal
William Tennent High School
Centennial School District
Warminster, Pa. 18974

PRESCHOOL AND PRIMARY EDUCATION PROGRAM

The program at Lacey Park School is a demonstration project designed to provide an enriched early school experience for children ages 3 through 7 years. Opportunities for continuous progress of a child in a nongraded school are made possible through team teaching, creative utilization of space and regular staff conferences.

In-service training is provided on a regular basis to make the teachers more aware of themselves and of their teaching behaviors, to increase their understanding of their children, to develop behavioral objectives and to sharpen their diagnostic teaching skills.

Parental involvement and the use of community volunteers in all phases of the program characterize the approach. Through recruitment, orientation and supervision by teachers and social workers, parents are given the opportunity to work in the classrooms. With parental involvement, the staff becomes more aware of family relationships and the family's impact on the growing child. Additionally, the parents learn more about how their children learn what the "school" expects of their children and how they can promote the growth of their children at home.

The regular small discussion groups of parents and the development of parent education projects grew out of an "open-door" policy at the school which supports the philosophical premise that parents can be involved in their children's education and the school expects parents to want to participate in the education of their children. The parent groups provide opportunities for the parents themselves to develop projects, agendas and programs that they themselves want. This process provides opportunities for representatives of various community agencies and services to establish a new level of understanding between these low-income families and the community resources.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 3-7 years old--not grades (ungraded)

Contact person: Betty K. Mellor
Director of Social Services
Centennial School District
Craven Hall
Warminster, Pa. 18974

RETARDED-EDUCABLE PROGRAM

An educable program is intended to provide intellectually retarded children with a flexible and personalized schooling which concentrates on the extension of basic perceptual-motor and academic skill training and experientially-oriented guidance in application of this training to social, vocational and personal endeavors.

In striving for this goal, the Centennial School District currently has eight elementary, four junior high school and six senior high school classes which are comprised of students who have been evaluated according to state regulations as being educable retarded. Integration of these students into all ongoing cocurricular activities with their peers is stressed.

Elementary classes are housed in a comprehensive elementary school which includes students representing the entire spectrum of learning ability. The comprehensive elementary school has been designed to accommodate all children including the physically handicapped, gifted and retarded-trainable, as well as "normal" students. This building also houses the instructional materials processing center, an elementary industrial arts center and a special experience room (ESEA Title III Project). A learning climate is being attempted where all education is special--including the retarded-educable program.

The occupation or vocational aspects of the educable program are strengthened at the junior high school level and are fully emphasized in the senior high school with an intensive work-experience program beginning at the 10th grade level. Classes follow a staggered schedule whereby a particular class section is in school for classes one week and then on the following week the class works under supervision at private business concerns, industrial plants, institutions and community agencies in the area. The Centennial School District has had genuine cooperation and support from the Pennsylvania Bureau of Vocational Rehabilitation in maintaining the work-experience program for eligible students. Upon completion of the school program the retarded-educable student receives the "regular" diploma and graduates with the 12th grade class.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: K-12

Contact person: W. Donald Vaughan
Director, Learning and Pupil Personnel Services
Craven Hall
Centennial School District
Warminster, Pa. 18974

SCHOOL BUILDING DESIGN

Centennial School District has developed and constructed a unique comprehensive elementary school. The facility houses physically handicapped, gifted, mentally retarded, language disabled and neighborhood children in grades K-6.

Because of its unusual design, it provides students with a unique educational environment which will lend itself to research in learning.

The program revolves around three centers--the library, the auditorium-gymnasium and a unique room--where sensory experiences form the core of the curriculum. These three centers are the nucleus of three classroom buildings which are joined by ramps and corridors in such a manner that complete interaction and utilization is facilitated.

It provides for total mobility of movement for each student from one educational classification to another. Movement is dependent upon individual ability, aptitude, need, interest and the students own educational growth and development.

The library is a total resource center with shelving for 10,000 books, study carrels, reference, reading and story-telling rooms; many types of audio-visual materials are also available. It provides for individual, small group or large group instruction.

The gymnasium-auditorium is designed for flexibility. It is fully equipped for a physical education program, and part of it is a corrective gym to help meet the needs of students with physical defiencies.

The stage is built to permit traditional programs or programs in the round. Near the gymnasium is a natatorium for instructional use by certain grade levels of all elementary pupils in the district.

The most unique part of the building is a special experience laboratory where special experiences, demonstration and experimentation can take place with children of varying abilities, needs and interests. The laboratory uses perceptual and cognitive experiences not heretofore available in the typical elementary school.

An addition to this school is presently under construction and will feature the open-space concept. The program involving this area will be implemented during the 1972-73 school year.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: K-6
Pamphlet available upon request

Contact person: Charles R. Walker
Assistant Superintendent for Elementary Schools
Everett A. McDonald Elementary School
Centennial School District
Reeves Lane
Warminster, Pa. 18974

THE SMALL COMPUTER IN THE CLASSROOM

The small computer has a definite place in the educational experiences of our students. Those students in our school who use the computer have very positive attitudes toward using the computer in their learning activities. We believe that the following is a unique use of the small computer (4K) in the classroom.

A class of 25 tenth grade students who attend our vocational-technical school in the morning and come to our school in the afternoon use the computer to strengthen their mathematics skills. One computer program asks the student to mentally approximate the product of two two-digit numerals. The student is given 10 products to estimate, one at a time.

For example: The computer randomly generates the numerals for the question:

"What is the product of 87 and 83?"

The student responds with his mental approximation, say 7200. (The actual product is 7221. The approximation by the student is very close.) The computer would print the following after analyzing this response of the student.

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Excellent!
You missed the actual product by only 21.
Your error was .3 per cent.
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(Other responses are--"Very good, not too bad and not a good approximation." The responses are a result of the accuracy of the student's approximation.)

Another question is then generated until 10 examples are done. At the end of the 10 examples, the students are given scores and discuss their performance with the teacher. The students have the option of accepting the score as a measure of their work or they may go through the program again. Each approximating experience is different and each is about the same level of difficulty. The program can be changed to any desired level of difficulty.

The students quickly become proficient in approximating products using our computer program. There are some combinations of numbers which, by using some lightening calculation methods, the student can respond with the exact product. The students look for these and try to discover other combinations.

We write programs to test for quotients, number facts, percentage, etc.

Students in the regular track write programs for our computer using conversational language. Students in our high ability track write assembly language programs. Students in our psychology classes use the computer to stimulate experiments.

THE SMALL COMPUTER IN THE CLASSROOM (Cont'd.)

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 10-12

Contact person: John Boyce
Mathematics Chairman
William Tennent High School
Centennial School District
Warminster, Pa. 18975

SUMMER PROGRAM FOR BILINGUAL EDUCATION

This is to be a six-week educational-cultural enrichment program for total families (from infancy through adulthood) of Spanish-speaking migratory workers living primarily in Centennial School District. The program is to provide a bilingual experience in learning that capitalizes upon the individual enrollee's language dominance and skills, emphasizing the values of bilingualism and providing an individualized prescribed curriculum which is responsive to the specific needs of each enrollee. Recognition is to be given the values of the Puerto Rican culture through regular recreational, social and educational activities which will be largely determined by the interests and motivations of the participants. As much as possible, the staff will be from Puerto Rico. Bilingual volunteers are to be used extensively, working with all age levels. A heavy concentration of language stimulating and enriching experiences will be dovetailed with the existing ESEA Title I reading program--head start and Centennial summer school. Comprehensive social and welfare educational services to all ages with the Spanish-speaking migratory community will be a unique feature of the efforts. The program will provide an opportunity for the school administration to evaluate in depth the Spanish-speaking population needs and test the effectiveness of a variety of education prescriptions. The program results will effect the building of a more appropriate full-year program for the Spanish-speaking population.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: Infancy through adult

Contact person: Kullie Mellor
Craven Hall
Centennial School District
Newtown Road
Warminster, Pa. 18974

VERTICAL INSTRUMENTAL TEACHING CONCEPT

A vertical teaching program has been introduced and used successfully for several years in the instrumental department of the Centennial schools. This employs the use of instrumental teachers, who are specialists on their instruments, to teach these instruments in grades 4 through 12 rather than be stationed in one school and teach all of the instruments. It enables instrumental students to have the advantage of studying with a teacher who is a specialist on the instrument rather than each teacher attempting to offer instruction on the heterogeneous instruments.

Under present time allotment of 15 minutes of instruction per individual each week or two to four students per one-half hour, only a highly specialized teacher can hope to make any progress with a student. To succeed, the teacher must not only be professionally competent in instruction, but of such dynamic personality as to create desire, discipline and pride in the students.

Vertical teaching is a much more practical and effective approach to the growth of teaching instrumental music.

The tremendous growth and success of the vertical instrumental teaching concept is evidenced by the overwhelming number of students in the program. Present enrollment is in excess of 1,700 students. Further significance of the success of the vertical concept are the many first section chairs acquired by these students in the county, district and state music festivals.

At the present time there are 15 bands and 15 orchestras in the school district. There is an orchestra and a band in each elementary school, varying in numbers from 32 to 76, depending on the size of the individual school. On a secondary level, there is a band and an orchestra in each of two junior high schools and one senior high school. There is a stage band on the secondary level. String, woodwind, brass and percussion ensembles function on all three levels.

There is also a symphonette and a symphonic band which meet one evening per week for a two-hour rehearsal. Membership in these groups is open to all students in the district regardless of age or grade level. Eligibility to participate in these groups is based upon the student's musical ability, sensitivity and readiness to perform music of the great masters and contemporary composers.

Vertical instrumental teaching is quality education which furnishes a reservoir of professional experience and ability which can be used by all students and teachers.

Additional Information:
School district: Centennial School District
County: Bucks
Grades: 4-12
Pamphlet available upon request

VERTICAL INSTRUMENTAL TEACHING CONCEPT (Cont'd.)

Contact person: James Morrell
Principal (K-6)
George C. Shelmire Elementary School
Centennial School District
Warminster, Pa. 18974

Ronald Y. White
Assistant Superintendent for Secondary Education (7-12)
George C. Shelmire Elementary School
Centennial School District
Warminster, Pa. 18974

THE WORDS IN COLOR APPROACH TO READING

"Words in color" was instituted by the superintendent of the school district in order to comply with the expressed wishes of the district's reading committee. This professional group, comprised of staff administrators, teachers and guidance personnel, recognized the nationwide problem that exists in helping all children to read up to their capacity. Teachers were familiarized with the program through a visitation to an area school and through workshops.

The program intensifies efforts toward development of early independence in the decoding process of reading and develops comprehension skills concurrently with decoding skills. Improvement of all language skills, including spelling, through one unified effort is stressed. An attempt is made to make teaching subordinate to learning so that the intellectual functioning level of each child is increased. Students are taught early in the program to substitute, reverse, insert and add sounds to develop endless combinations of sounds or words.

Each of the 47 speech sounds is assigned a different color, making the language phonetic without changing conventional letter shapes or spellings. From the beginning, students are told a sound that goes with a symbol only once. The teacher gives visual and oral dictation to the students so that they are involved in writing and spelling all that they see and hear. Through the writing of creative compositions, students discuss the meanings of words and sentences which they build through the combining process. One book, the Word Building Book, contains charts that begin with a few sounds and concludes with a large chart containing signs for all the speech sounds and every spelling. Students become independent quickly because the color provides a dependable, constant clue to the sounds in a word. The component parts of words are sounds which they can move about to make other words. Through activities that are gamelike, reading at the speed of speech is emphasized.

Additional Information:
School district: Centennial School District
County: Bucks
Grade: Used in some 1st grades

Contact person: David T. McIlhenny
Principal
Willow Dale Elementary School
Centennial School District
Warminster, Pa. 18974

CENTER HIGH SCHOOL
BIOLOGY II

To enrich and expand the science program, Biology II has been added to the high school curriculum.

Biology II is a course offered as an alternative to satisfy the needs of those juniors and seniors who prefer to study the life sciences rather than physics and earth and space science.

Because of the students' limited background and experiences, few are aware of the many related fields of biology other than those of the medical professions. With this in mind and with the knowledge that these same students express a desire to pursue a career in medicine or nursing, the course has been designed to provide a sound foundation for entrance into the medical arts. The subject areas to be studied and the various specimens for dissection have been especially selected to provide the student with an understanding of the anatomical and physiological terms and nomenclature applicable in the various medical fields.

Biology II is an elective subject offered to students in the 11th or 12th grade. A prerequisite to the course is Biology I and Chemistry.

Additional Information:
School district: Center Township School District
County: Beaver
Grades: 11-12

Contact person: Donald Miketa
Science Department
Center High School
Center Township School District
Baker Road Extension
Monaca, Pa. 15061

CENTER HIGH SCHOOL OFFICE WORK-EXPERIENCE PROGRAM

The purpose is to provide the students with the opportunity to participate in an office situation so they cannot only put their skills to work but also observe the operation of a business and learn where and how they would fit into the picture. The student should then be a better employe when he enters the labor market in June.

The program is scheduled for a nine-week period, beginning late in January. The students are available for work at 1 pm. The employer established the working hours.

When placing a student, interests as well as the type of work expected is considered. The student is expected to follow all instructions and rules as required of regular employes.

The employer is not expected to teach the students fundamental skills. They should be able to contribute to the employer's program. All students placed are capable of doing general office work. Details concerning specific capabilities can be obtained upon request.

The Pennsylvania State Business and Vocational Education Department has stated that the student worker must be reimbursed for the work. Special forms are provided the employer who has hired a student worker. Reimbursement must be a percentage of the current minimum wage or a wage paid a beginning office employe in that firm.

The office work-experience program is a part of the stenographic curriculum. To qualify, a student must have earned at least a "C" in Shorthand I and be enrolled in Shorthand II, transcription and office practice.

Additional Information:
School district: Center Township School District
County: Beaver
Grade: 12

Contact person: Virginia M. White
Business Education Department
Center High School
Center Township School District
Baker Road Extension
Monaca, Pa. 15061

CENTER HIGH SCHOOL VOCATIONAL HOME ECONOMICS

The vocational home economics classes are designed for the needs, interests and abilities of the individual student and the development for later life as a homemaker or as a member of the work force. The courses are divided into six special areas, each one semester in length. The areas are: foods, nutrition and home nursing; clothing, textiles and consumer economics; child care and family relations. A student can develop abilities according to individual interests and in the area of choices. Students are encouraged to continue in the majors program once they begin and thus obtain a greater knowledge of all the areas necessary for a future homemaker.

The objectives of the program are in relationship to each special area. In the foods and nutrition course, the students obtain basic knowledge and understanding of the necessary nutrients and their relationship to the body as well as the foods in which they may be obtained. The principles of food preparation are learned during actual experience of working in the laboratory. The home nursing course deals with the care of the sick and/or the injured. This requires a knowledge of first aid, basic nursing duties and proper selection, preparation and serving of food. Objectives of clothing and textiles include an advanced understanding of sewing skills, which provides a background for employment as a seamstress. This objective is obtained through the construction of garments chosen by the individual students. A thorough understanding of textiles from fibers to fabric forms the basis of informed consumer buying of clothing. Other areas of consumer economics included are earning, saving, budgeting and spending to aid the girls in becoming wise consumers. A course in family relations offers the girls a chance to study and discuss problems of dating, marriage and family living to guide them as homemakers. Child care is included to give them an opportunity to understand their role and duties as a mother or in some related occupation field of child care such as nursery school director, social worker or babysitter.

The vocational programs offer terminal students a chance to develop skills that will aid them in obtaining employment and, at the same time, provide them with basic skills to be used in homemaking duties.

Additional Information:
School district: Center Township School District
County: Beaver
Grade: 9-12

Contact persons: Jan Vohar and Helen Hall
Center High School
Center Township School District
Baker Road Extension
Monaca, Pa. 15061

NONGRADED PRIMARY SCHOOL

Center Township School District has had an ungraded primary program for the past three years. Children are grouped on the basis of reading levels. There are 10 reading levels in the primary grades roughly corresponding to the levels of most basal reading series. The approach to reading instruction is multi-basal. Beginning with the 1971-72 school year, the traditional readiness program will be replaced with a concentrated phonics approach.

Children move from one reading level to the next as rapidly as their abilities and interests permit. They may be moved from one room to another if their needs can better be met by so doing.

At present all teachers have three contiguous groups within their classrooms. They are guided by a course of study which is set up as a continuum. Children are evaluated periodically by standardized tests, basal reading tests and informal inventories. A corrective reading program is available for children who need such help. Placement in the corrective program is decided after a thorough individual diagnosis by the reading supervisor.

A cooperative program with Geneva College provides teachers with student aides. These are junior and senior college students enrolled in the teaching of reading courses. Student aides spend one-half day each week in the school.

Report cards reflect the nongraded philosophy of the school in that the traditional letter-grades have been replaced with the following symbols: "G"--very good progress for the child, "N"--needs to improve, "S"--satisfactory progress for this child. Every effort is made to relate the children's achievement to their ability.

In mathematics there are 15 levels. Ungraded materials are used. Spelling is also ungraded and in some instances an individualized approach is used. Science and social studies are an important part of the curriculum. The nongraded approach in these areas is accomplished by adjusting method and content depending upon individual and group needs. Behavioral objectives are being incorporated into the curriculum along with evaluative checklists based upon the objectives.

Additional Information:
School district: Center Township School District
County: Beaver
Grades: 1-3

Contact person: Donald E. Bradshaw
Director, Elementary Education
Center Township School District
Baker Road Extension
Monaca, Pa. 15061

REMEDIAL READING

The recognition of the importance of reading in all phases of learning, and the realization that a severe reading handicap is a major cause of failure in school and, consequently, one cause of dropping out of school, was instrumental in starting an indepth study of the existing reading program. An evaluation of this study led to the initiation of a reading program for the purpose of raising the reading level and general educational level of the educationally, culturally and economically deprived child.

This program consists of a remedial reading program for pupils in grades 3 through 7, a developmental reading program aimed at prevention as opposed to remediation at the 2nd grade level and one transition class for 1st grade pupils who have had no preschool experience.

In the remedial reading classes, students with one or more years of retardation, but with a mental ability to achieve at a higher level, are given individual or small group instruction for 40 minutes daily in four of the reading centers, and for two days per week in two centers. The maximum class size is eight.

At the 2nd grade level, all pupils in the program are given small group instruction daily. The emphasis is placed upon a developmental program which will fit the needs of the pupils. Perceptual skills and language development are stressed.

The transition class is composed of 15 pupils who have been identified from the Metropolitan readiness test and from readiness checklists and teacher observation as being unlikely to achieve success in the regular classroom. This class meets for full-day sessions five days per week. Opportunity to explore, solve problems, create and discuss is an important part of this program.

In order to cover eight elementary schools scattered over a wide area, one mobile unit, three stationary trailers and three specially equipped rooms in three buildings are utilized.

Several features have been incorporated into this program. Most important was the selection of highly qualified reading teachers. Daily planning time to allow teachers to select the proper materials and to determine the most effective methods for each child is an important part of the program. Scheduling classes to coincide with regular classroom reading periods has been adhered to to avoid loss of time in other subject areas. Weekly meetings of the remedial reading teachers and district reading supervisor allow for the discussion of common problems, new techniques and materials and in general aid in the planning and evaluation of the program. In-service workshops, using experts in the field of reading from local colleges, help the teachers to keep abreast of new developments in reading.

REMEDIAL READING (Cont'd.)

Additional Information:
School district: Central Greene School District
County: Greene
Grades: 1-7
Pamphlet available upon request

Contact person: Beatrice V. Guesman
Reading Supervisor
Central Greene School District
R. D. #2
Waynesburg, Pa. 15370

COMPARATIVE RELIGIONS

Judaism, Christianity, Buddhism and Islamism are the foundations of this course.

The approach concentrates on the teachings of these religions. Little or no regard is given to the historical context in which these various religious groups developed. As presently projected, discussion of modern religion in the modern world is a keystone issue. Hopefully, this discussion will be spearheaded by local clergymen, taking the role of guest lecturers.

Additional Information:
School district: Chester City School District
County: Delaware
Grades: 12

Contact person: Francis J. Moran
Teacher, Social Studies Department
Chester City School District
Eighth and Fulton streets
Chester, Pa. 19013

HUMANITIES

The purpose in establishing a course in the humanities was to help the students develop an appreciation for the cultural contributions of western civilization. As a result of developing this appreciation, it is hoped that the students will be better able to enjoy and take part in the cultural activities available to them in the community. The project has many objectives which aim to define the areas of interest in the humanities and to relate this information contained in the humanities to everyday living whenever possible.

To achieve these aims, the various subject teachers (music, art, history and English) present the backgrounds of each era and try to cover the main forces and ideas of the period. Field trips are taken to museums to supplement the work in the classroom. Library reading is encouraged. Success of the course so far is indicated by students' reactions. They do read other than assigned works. They "relate" to magazine articles and advertisements and to television programs which cover subjects touched on in the course.

Trying to determine the long-range results of such a program is difficult to do since a follow-up would require time and assistance which is not available.

Additional Information:
School district: Chester City School District
County: Delaware
Grades: 11-12

Contact person: Marie A. Hogan
Chairman, Social Studies Department
Chester City School District
Eighth and Fulton streets
Chester, Pa. 19013

IMPETUS

Identification and Modification of Psychological and Educational Traits to Unblock Student may be viewed as the City of Chester's experiment in a clinical and educational support system. Each culturally deprived and economically disadvantaged student burdened with the unique educational characteristics and needs can receive specific diagnosis and a stipulated treatment in order to be retained in the normal educational continuum.

This type of educational program was acutely needed to service urban students to create an optimistic title which would define goals and mobilize the activities while introducing modern psychological and psychiatric techniques for treatment, evaluation and readjustment.

The title IMPETUS sums up the project's scope and range.

The title encompasses the services of specialists in fields of clinical psychology, educational psychology, psychiatry, neurology, dentistry, social work and the esoteric field of specific learning disability teachers. The implied and actual impediments include a paucity of clothing, cultural enrichment voids, lack of convenient transportation and tenuous home and school relations as well as specific and unique educational blocks. The district acquired a building formerly occupied as a private medical center and converted the suite of offices into a pupil service center.

The pupil service center houses not only the multi-disciplinary diagnostic staff personnel but also the individual reading skills center. The IRSC includes the "talking typewriter," the recent invention of the prominent social psychologist, Dr. Omar Moore of the University of Pittsburgh, as a strategic learning device and a staff of remedial reading teachers versed in the esoteric techniques of VAKT.

Now in its sixth successful year of continuous daily operation, the pupil service center is open from 8:30 a.m. to 8 p.m. weekdays and Saturday mornings 50 weeks each year.

Additional Information:
School district: Chester City School District
County: Delaware
Grades: Pre-K-12
Pamphlet available upon request

Contact person: Charles R. Mekeel
Director, Federal Aid Projects
Pupil Service Center
Chester City School District
500 W. Ninth St.
Chester, Pa. 19013

LINGUISTICS

In the 11th and 12th grade "express" English classes at Chester High School, the emphasis is placed on the "how" of learning rather than on the "what." It is not important that students be given "right" answers, but that they learn how the answers are produced, how knowledge is generated, how learning is conducted.

The only lasting way to make students better users of language is to help them become good observers of how language works. The burden of intellectual inquiry will be carried by the student, not the teacher or the textbook. It will require that students become involved in the processes of defining, question asking, data gathering, observing, classifying, generalizing and verifying in matters of language--in short, the "scientific" approach to language learning.

The skills which should be developed by the students in written expression should include those of (1) mechanics--competence in use of fundamentals of capitalization and proficiency in use of simple forms of punctuation; (2) grammar--growth in ability to write interesting and accurate sentences, growth in ability to combine sentences into paragraphs which develop a block of thought, ability to recognize six commonly used parts of speech, understanding that a part of speech is determined by how a word is used; (3) spelling--techniques of word attack, use of the dictionary and proofreading of written work; (4) composition--application of above qualities in developing good sentence and paragraph techniques in factual writing; competence in making an outline and taking notes, ability to write a theme; (5) creative writing--ability to express with spontaneity individual ideas in prose and poetry, ability to develop articles of a journalistic nature for printing in the school paper.

The skills which should be developed by the students through reading should be of two varieties, general or specific.

The specific skills for reading may be subdivided into two types as well--skills of comprehension and reading to locate information.

Additional Information:
School district: Chester City Schools
County: Delaware
Grades: 11-12

Contact person: Francis J. Smagalla, Chairman
Language Department and Teacher of
"Express" English Classes
Chester High School
Chester City Schools
Eighth and Fulton streets
Chester, Pa. 19013

PROGRAM FOR THE VISUALLY LIMITED

The program for the visually limited is designed to aid visually limited children by supplying them with special equipment and special training to overcome the educational handicaps caused by their visual impairment. The special training and special equipment would vary according to the needs of the individual student. Generally, these special materials would include magnifying lenses, special paper and talking books, tape and cassette recorders and large-type typewriters.

The special training would include the use of the above equipment, training in the use of Braille, adaptations needed for reading and visual stimulation materials. The use of the abovementioned materials and teaching techniques are determined by the needs of the student as determined by the visual consultant. When the child enters the secondary schools, emphasis changes from the training of special aids to planning for future placement in academic, business or vocational programs.

Currently, the program for the visually limited is staffed by one full-time visual consultant/coordinator, one part-time visual consultant and one part-time materials aid. Currently, 19 children from kindergarten to 10th grade are being serviced by the program.

Additional Information:
School district: Chester City School District
County: Delaware
Grades: K-12

Contact person: Richard W. Dalton
Visual Consultant
Chester City School District
500 W. Ninth St.
Chester, Pa. 19013

RACE RELATIONS

Race relations deals with problems, current and past, encountered by Black Americans. The course acts as a catalyst in bringing about a better understanding between the races.

The course includes a brief history of segregation, a study of various historical theories concerning segregation after 1865, a research project dealing with leaders--black and white--involved in civil rights from the 1900's to the present.

Case studies are used to formulate opinions for class discussion and students, in turn, are encouraged to write about and act out their own experiences involving prejudice.

Television programs such as "Rush Toward Freedom" are regular class assignments. Field trips to movies such as "The Great White Hope" are also encouraged.

Student reaction to the course has been favorable. Those who have taken the course state they would recommend it to their friends.

Additional Information:
School district: Chester City School District
County: Delaware
Grades: 11-12

Contact person: H. P. Ambrogi, Addie Checks, Shirley Johnson
Teachers, Social Studies Department
Chester City School District
Eighth and Fulton streets
Chester, Pa. 19013

READINESS FIRST GRADE CLASSES

Of the approximate 950 kindergarten students passing through the Chester system each year, it had been noted that at least 200 appeared to have average learning potential but were rated as poor prognosis on the Metropolitan readiness test.

At this early elementary level, the program will develop all the psychoeducational areas recognized as being prerequisites for successful reading experiences. The target population for this program which includes four 1st grades, each teacher having a classroom aide, are the children of average intelligence who attended the district kindergartens last year and whose classroom performance by teacher observation indicates a lack of readiness for success in 1st grade as well as a poor prognosis on the Metropolitan readiness test. Pupils will be assessed to determine their optimal input so that the most effective learning theory of reading may be prescribed and initiated. As in any comprehensive program, the children will be administered to through the supportive services so that greater realization of their personal and social potential can be achieved.

Both teachers and aides are receiving in-service training so that the eclectic techniques of specific learning disabilities for children having minimal cerebral disfunctions for children in need of support due to maturational lag will be fully comprehended and applied to the instructional processes. There is also at this time a control group which will be used in measuring the evaluation of the success of this program. Such a program, it must be realized, will take at least three years before the full impact of this concentration can be realized.

Additional Information:
School district: Chester City School District
County: Delaware
Grade: 1
Pamphlet available upon request

Contact person: Charles R. Mekeel
Director, Federal Aid Projects
Pupil Service Center
Chester City School District
500 W. Ninth St.
Chester, Pa. 19013

YOUTH TUTORING YOUTH

"Youth tutoring youth" is a cross-age tutoring program that has been going on for several years in city schools throughout the nation. Chester's "youth tutoring youth" program involves giving an "under-achieving" junior high school student a new role of responsibility; that of a tutor of elementary school students.

Most people expect tutoring to focus entirely on reading, writing and arithmetic, skills in which the tutee needs help. While the tutors and tutees do read, write and do math together, "youth tutoring youth" really expects the tutor to be something very different. The main focus is really on the tutoring relationship, rather than just on the deficit skills by which students are labeled "low-achievers."

Thus, "youth tutoring youth" is tutors and tutees learning to see themselves in more positive ways, in addition to the focus on basic school skills. Our basic philosophy is that the more the tutors or tutees get a positive definition of themselves and the more competent they feel as individuals, then the more receptive they will be to whatever instruction goes on in the classroom.

To achieve this goal, our program uses the children's own experiences and interests as the staging point for instruction. Thus, the tutees will be able to say that they are studying about themselves, their interests, their experiences and their feelings.

Ten tutoring centers are operating in the elementary schools, from 5 p.m. to 6:30 p.m. on Monday, Tuesday, Wednesday and Thursday and from 8:30 a.m. to 12:30 p.m. on Saturday mornings. Each center is staffed by a project guide who is an experienced teacher; an aide who is a high school student and by approximately 10 tutors. Each tutor receives eight hours of preservice training and services six tutees in three half-hour tutoring sessions on a one-to-one basis each week.

Thus, each tutee receives one and one-half hours of tutoring each week. In addition, the project guide conducts a weekly in-service training session for one hour and directs the tutors in one hour of weekly personal remediation.

Additional Information:
School district: Chester City School District
County: Delaware
Grades: K-12

Contact person: Charles R. Mekeel
Director, Federal Aid Projects
Pupil Service Center
500 W. Ninth St.
Chester, Pa. 19013

COMMUNICATIONS, FINE ARTS AND PHYSICAL EDUCATION

This federally-funded program was conceived to supplement and/or improve six areas of curricular or service offerings. The project areas have operated continually with some modifications for two years.

Instruction in language arts and communications has been improved through analysis of student needs, subsequent addition of professional staff and initiation of a diagnostic reading clinic in September 1970. Library services have been improved, especially in elementary schools; standards for book collection are being fulfilled rapidly. Certified librarians have been added to the elementary staff, and paraprofessional personnel have been given preservice and in-service training to supplement the library staff.

Previously lacking, an elementary guidance department has been initiated through this project. Five counselors now work with students, teachers and parents.

Students are taught basic piano skills and music appreciation through the use of electronic piano centers. Forty-two piano units are distributed among six centers throughout the district. Students are instructed in groups and may receive individual help through earphones by teacher manipulation of a control panel.

Supervised physical education and recreation activities have been made available to district pupils on a year-round basis. Diversified activities are offered during the school term and summer playgrounds operate at 26 locations throughout the district.

Both remedial and enriched supplementary instruction are offered in summer school. Secondary pupils who have failed a course during the term have opportunity to do make-up work and erase the failure, thus helping to prevent dropouts. Paraprofessional aides are assigned to each principal, public and nonpublic, who in turn assigns them to perform duties most urgently needed in their respective building.

An environmental education program component consists of content materials in the area of natural resources, the development of attitudes concerning the wise use of natural resources and the involvement of students in practical applications of their knowledge.

Additional Information:
School district: Connellsville Area School District
County: Fayette
Grades: K-12

Contact person: John H. Sloan
Federal Funds Coordinator
Connellsville Area School District
Race Street
Connellsville, Pa. 15425

CLASSES FOR PERCEPTUALLY HANDICAPPED AND BRAIN-INJURED CHILDREN

The Division of Special Services of the Cumberland County public schools provides a number of classes for children of the county who have a neurological dysfunction and, probably, an auditory or visual perception disability. A sequential pattern of perceptual and cognitive development is used to designate the various levels and types of classes. The youngest children and those whose learning problems are difficult to identify are placed in a diagnostic developmental class where a teacher specialist does diagnostic teaching. Children with perceptual or motor difficulties are assigned to a sensory-motor development class. Auditory-language development classes are provided for children whose primary disability is a language disorder.

Once perceptual and language disorders have been made less of a problem, children are advanced to a conceptual readiness class where fundamental academic concepts, which were introduced in the beginning classes, are stressed to a greater degree. When children have learned some phonics and have developed the concept of sound-symbol relationship, they are moved to a basic skills class where reading, arithmetic, spelling and writing are emphasized. The children are promoted to an educational restoration class when they are achieving close to a 3rd grade level. The purpose of this class is to help children "catch up" in subjects so they can be returned to a regular class in the school district. Children who take too many years to learn their basic skills or who have a neurological defect which makes it too difficult to achieve in academic learning are eventually placed in an intermediate class where they are taught the skills needed for independent, competent living as an adult. These children may return to a secondary special education class or may be sent to a workshop setting.

The multi-sensory approach is used as much as possible in all classes. Specialized techniques are used in sensory-motor development and in phonetic instruction. A sequential "core" program is followed in perceptual development and in reading and arithmetic instruction. Prescription teaching, based upon intense diagnosis of learning problems, is provided for each child. Speech therapy, physical therapy, language development, visual and hearing services, psychiatric counseling and medical services are available as needed. The special services staff, in cooperation with consultants, has developed a number of remedial and diagnostic techniques. Research is used to learn more about the development of the perceptual and cognitive processes.

Additional Information:
School district: Cumberland County Division of Special Services
County: Cumberland
Grades: Ungraded

Contact person: John B. Springer
Director, Division of Special Services
Capital Area Intermediate Unit #15
26 N. Ninth St.
Lemoyne, Pa. 17043

ADVANCED PHYSICS

A second year physics course was added to the science program to meet the needs of science-oriented students. The text and laboratory book used in this course are of college level. The program consists of three lecture periods per week and two double laboratory periods. Many of the students in the advanced physics course also schedule a high school course in calculus.

Objectives are to introduce the student to mathematics in physics, to develop laboratory techniques and to develop a method of critical thinking. To achieve these objectives, the students work on their own in the laboratory, as well as work on assigned problems of a given topic. Most class sessions are spent on the derivations and proofs of the basic laws. The student is also asked to work with relativity as well as classical mechanics.

In setting up the program it was found that additional books had to be ordered for the physics reference library. The book list includes college texts and books on selected scientific topics. In order to complete some of the experiments in the program, it was necessary to add additional laboratory equipment.

While this is a relatively new program, the results are indicative of student interest and excellent advanced training for the college-bound student.

Additional Information:
School district: Derry Township School District
County: Dauphin
Grades: 12

Contact person: L. Eugene Jacques
Superintendent of Schools
Derry Township School District
Homestead Road
Hershey, Pa. 17033

TEACHING SHORTHAND IN THE LANGUAGE LABORATORY

An Acoustron learning laboratory of 30 stations with individual headsets and console of five channels, with six other channels available through input process, has been placed in close proximity to the language and business departments of the school. Scheduling is arranged so the laboratory is available during all periods when the advanced shorthand class meets and one full and two part periods for its use with the beginners. The laboratory is also extensively used during the adult evening school shorthand classes.

Numerous tapes have been made personally by the shorthand instructor; and many tapes of various speeds have been purchased commercially including transcription and medical dictation tapes. Channel 5 is a four-speed record player; therefore, shorthand materials on records may also be used.

The use of the laboratory for dictation purposes permits the students to take dictation speeds according to their own ability. Commercial tapes have various professionals dictating the material. This helps the student to obtain confidence in taking dictation from several people and diminishes the monotony of hearing the same voice.

Using the learning laboratory with a beginning shorthand group enables the teacher to place outlines on the chalkboard while the student is following the lesson on tape. The teacher is also free to walk around and check the work of the students and assist them wherever necessary. If an individual needs extra instruction, the class continues without interruption while the teacher helps the student who needs assistance. Since each listening station is enclosed in front in glass, the teacher is able to view the writing characteristics of each individual without interrupting the writing procedure. Beginners use tapes.

While the laboratory has not as yet been used with notehand classes, commercial tapes are available in lecture form for developing notetaking ability. The only problem here is to arrange schedules that will not clash with language classes.

The learning laboratory provides incentives for increasing shorthand speed, it offers an opportunity for a change in regular class environment, it allows the student to conveniently make up any regular assignments or Gregg awards dictation if the student has been absent during the original presentation and it also frees the teacher from lengthy periods of dictation.

Additional Information:
School district: Derry Township School District
County: Dauphin
Grades: K-12

Contact person: Joseph Sopko
Teacher, Business Education Department
Derry Township School District
Homestead Road
Hershey, Pa. 17033

INTRODUCTION TO AMERICAN INDUSTRY

Industry is a vital and dynamic force in our contemporary society. Indeed, American industry is the backbone of our country. Such a significant area of study should not go unnoticed in our schools. One area of the school--industrial arts--has the means to make a study of industry come alive and have real meaning for its students. The program discussed here has been taught as an introductory course in industrial arts at the junior high school level. However, like any subject, the basic ideas can be expanded for instruction at any level, provided proper methodology is utilized.

The course is divided into 10 basic units of study and exposes the students to such topics as management, finance, research and development, production, marketing and industrial relations.

The program utilizes student participation to a large extent in addition to traditional lecture and discussion sessions. Many varied activities are provided which offer the students an insight into the operations of a modern company.

Each class is formed into its own company with the students choosing a company name, designing a trademark, electing officers and printing employe identification cards. Stock certificates are printed and each employe has the opportunity to invest money in his company.

An idea for a product is then researched and developed into a useful and practical form. A production line is established in which the students mass produce a large number of products complete with packaging. Flow charts, bills of materials, plant layout diagrams, jigs and fixtures are all utilized.

The finished and packaged products are advertised and sold to consumers. The money received from the sale of products is used to pay expenses and the profits provide dividends for the stockholders.

Information about unions, strikes, collective bargaining, fringe benefits, etc., it also presented.

Hopefully, at the end of the course, all students should have an understanding of the basic elements of American industry and its place in our society.

Additional Information:
School district: Downingtown Area School District
County: Chester
Grade: 7
Pamphlet available upon request

Contact person: Ronald H. Fricker
Lionville Junior High School
Downingtown Area School District
50 Devon Drive
Downingtown, Pa. 19335

ELEMENTARY AGRICULTURE

The elementary agriculture program in the Eastern Lancaster County School District is concerned with four major areas: (1) soil, water and wildlife conservation; (2) farm and home safety, (3) farm and home sanitation and (4) opportunities in farming and agri-business.

In a day when environment and ecology are household words, this program is geared to reach all boys and girls in the 6th grade throughout the district and provide them with some background and basic knowledge in these areas using agriculture as a vehicle for such a study. This makes it very relevant to all segments of a rurally oriented school population. It also provides basic agricultural knowledge to those students who will drop out of the public school system following the 6th grade and finish their education at a one-room parochial school.

There is quite a high level of accidental injury and death on local farms, much of it among small children and young adults. Much of this can be traced to a lack of knowledge or carelessness, especially among those farms recently mechanized. In addition, the use of draft animals creates danger for the handler who lacks knowledge or caution. During the years when safety habits and conservation practices are learned, there is a complete lack of knowledge, instruction and guidance in such matters.

It has been noted that conservation practices are limited on many farms. Sanitation in both rural homes and on the farms is often woefully inadequate. Septic tanks are poorly located or even nonexistent. A great number of home water supplies (wells and springs) are polluted and many local streams are becoming polluted as well.

The program is set up to include the following activities: classroom lectures and demonstrations, group discussions, films and filmstrips, resource people, field trips, home visitations and parental contacts.

Every child involved in the program has the opportunity to have the home water supply tested and a sample of soil tested and analyzed by cooperating agencies. The results of such tests are explained as well as an interpretation of the outcome. Environmental education is stressed in all phases; and built into the program is the use of an outdoor conservation laboratory.

Additional Information:
School district: Eastern Lancaster County School District
County: Lancaster
Grade: 6

Contact person: Robert D. Herr
Agriculture Teacher
Eastern Lancaster County School District
Route 23 and Tower Road
New Holland, Pa. 17557

THE LABORATORY APPROACH TO READING

Recognizing that many students repeatedly experience failure with the traditional reading curriculum, a multi-media reading program was designed specifically for those students who have long been intimidated by the printed word.

Using the programmed format in a reading laboratory setting, efforts were made to capitalize on individualized learning--shifting the responsibility for learning from the teacher to the student.

The physical confines of an average classroom were made more attractive with the quiet luxury of wall-to-wall carpet and background music. Two thousand paper-back books on spinners and islands add to the "soft-sell" approach. In addition, the laboratory was outfitted with individual carrels, controlled readers, tachistoscopes and all the audio-visual instruments needed to "tune in" those teenagers McLuhan calls "psychic dropouts"--kids who have mastered the art of sitting in without being in the least involved.

Having been enticed to read, the instructional program in the form of filmstrips, recordings and skill building materials takes over, fitting the needs of each student and freeing the teacher for professional handling of special problems. The number and variety of selections on all grade levels permits the student to start at the independent level of reading and move in a developmental pattern toward capacity.

Much emphasis is placed on perceptual accuracy and desirable reading habits, which can be applied successfully in other reading situations. Since comprehension is really the only significant reason for reading, this course is structured for improvement in comprehension. Speed becomes a by-product.

With a system geared to success for everyone at his own pace, the student-centered laboratory has bridged the gap between yesterday and tomorrow.

Additional Information:
School district: Eastern Lancaster County School District
County: Lancaster
Grade: 8

Contact person: Beatrice H. Gillman
Reading Laboratory Teacher
Garden Spot High School
Eastern Lancaster County School District
New Holland, Pa. 17557

LEARNING 100 PROGRAM AUD-X

To help those students who are reading two or more levels below their grade standing, a multi-media basic education communication skills program has been instituted. The goal of the system is to produce competency in reading and communication skills.

The basic equipment used in the Learning 100 program is the Aud-x machine. With cassette and record, the material is presented to the students visually and audibly simultaneously. The skills learned by this method are reinforced by the use of study guides, magazines, tachistoscope and controlled reader.

The Learning 100 program is designed to help the potential dropout, out-of-school youths, undereducated disadvantaged adults and foreign-speaking people.

In this program, the Aud-x equipment is used for remedial 7th and 8th grade students only.

Additional Information:
School district: Eastern Lancaster County School District
County: Lancaster
Grade: 7-8

Contact person: Helen Hollyday
Reading Teacher
Garden Spot High School
Eastern Lancaster County School District
New Holland, Pa. 17557

SPECIAL SERVICES

The project is designed to meet the needs of the educationally and economically disadvantaged students of the Easton Area School District. Many of these students are unable to cope with the expectations of the schools, experience failure early, become grade repeaters and summer school candidates, exhibit behavior and adjustment problems and make up the lion's share of the dropouts and delinquents. Hence, a project was developed to eliminate as many barriers to a sound education as possible.

Students are afforded individual or small group instruction in reading centers in each project school, using multi-media approaches. In addition to working with the students, Title I reading teachers are available one day each week to work with the classroom teachers on a consulting basis. The reading program is bolstered by the use of a bookmobile, which brings many new materials into the lives of these children.

A special project provides help for kindergarten and 1st grade children with perception handicaps. Identification and remediation procedures are carried out in three public and two parochial schools. Students are given instruction in small groups utilizing techniques designed to improve perception and prevent later academic failure. An interdisciplinary team studies each child to find the best solution to the particular perception problem, visual and/or auditory. Their parents and their regular classroom teachers are involved in an overall program of orientation and planning.

Cultural enrichment activities are designed to provide as wide a spectrum as possible. Most of this is done in the summer in conjunction with the reading program and involves taking the students to places of interest; and on occasion during the regular school year, activities as plays and musical programs are brought to the students.

Psychological, guidance and social work services are provided to enable the student to make maximal use of the available educational services. This team attempts to assist the individuals to understand and to accept their abilities, aptitudes, interests and aspirations in order to obtain optimal adjustment between individuals and their environment.

Additional supportive services are available to a number of handicapped learners. These services include food, clothing and medical and dental attention and are provided if no community services are available.

Additional Information:
School district: Easton Area School District
County: Northampton
Grades: K-6
Pamphlet available upon request

SPECIAL SERVICES (Cont'd.)

Contact person: Nicholas R. Cericola
Administrative Assistant
Easton Area School District
811 Northampton St.
Easton, Pa. 18042

FAMILY LIVING

Family living stresses the importance of the family and its role in society. The institution of the family is one of the most important influences in guiding one's values, beliefs and attitudes. The course deals with ways of understanding families by looking at each stage of the life cycle and showing the interaction between the family and society.

The course stresses that we need to understand our own identity psychologically, physiologically and sociologically in order to understand and relate to others. It deals with various topics such as physiological and psychological needs, how the personality is formed, human sexuality, venereal disease, mental illness, nutritional values, overpopulation, abortion, drugs, religion, smoking and alcohol and reproduction. It explains how the family has progressed from the traditional family where the father was the patriarch and sole ruler to the democratic family where each member has a say. It also discusses the change from the extended family clan to the nuclear family.

All topics are discussed in an intellectual, factual manner with much emphasis placed on correct terminology. The course always gives both sides of any topics and lets the students form their own opinions after exposure to all relevant information. Individuality is emphasized as important but we should remember that we are all a part of society and must work for its betterment. This is a required course for all 11th grade students.

Additional Information:
School district: Exeter Township School District
County: Berks
Grades: 10-12

Contact person: A. Durand Osborne
Exeter Senior High School
Exeter Township School District
Thirty-seventh and Woodland streets
Reading, Pa. 19606

READING AS A LABORATORY EXPERIENCE

Exeter Junior High School's reading laboratory is designed to encourage a complete indepth developmental reading program that will carry each student to a personal reading potential.

This individually-oriented course provides, first of all, a pleasant reading environment. A bright, spacious, carpeted room, equipped with individual study carrels and soft, piped-in music is a pleasant change from the physically structured classroom. By holding classes to a maximum of 17 students and with the aid of a "no-grade" policy, relaxed informality is the rule--not the exception.

Classes meet one period daily for nine weeks making a total of 45 hours of participation for every 8th grade pupil.

The program trains the students in reading and listening efficiency. With the use of the latest technological instruments and with the finest materials available, students receive training designed to meet their specific needs. Five different areas are listed below:

1. Visual training (tachistoscope and controlled reader)
2. Reading fluency (controlled reader)
3. Vocabulary enrichment
4. Listening
5. Study skills

In order to make the training practical and meaningful, one period each week is devoted to recreational reading. A fine paperback library fills one corner of the classroom--the students have full liberty to use the library at will. No book reports are required.

A complete pre and posttesting program and frequent student-teacher conferences provide measurement and evaluation of results of each student's exposure to the reading laboratory.

The objective of the program is to provide a wholly new attack that will highly motivate pupils to improve their reading abilities. The first year was highly successful. Pupils will be checked a year after the laboratory experience to determine its lasting quality. Short refresher experiences will be provided if deemed necessary.

Additional Information:
School district: Exeter Township School District
County: Berks
Grades: 7-9

Contact person: Adeline Sager
Exeter Junior High School
Exeter Township School District
East 39th Street
Reading, Pa. 19606

SENIOR HIGH SCHOOL BASIC LEARNING PROGRAM

The basic learning program is designed for those students who, for varied reasons, do not or cannot profit from regular classroom instruction. This is a program which offers a curriculum that more readily meets the needs of these students and more adequately prepares them for their future as contributing members of society.

The curriculum of the core program emphasizes three major areas of study. These are the basic skill subjects, occupational orientation and social and personal adjustment. In the basic skill areas the students are taught reading, through a program that best remedies their particular diagnosed disability; practical English, which includes more effective oral and written communication; basic mathematics and its practical applications, which includes budgeting, banking, buying, taxes, insurance, etc. In the occupational study the students are taught the proper attitudes which should be expressed on the job. They explore ways of finding jobs, the interview, ways to keep jobs and even how to spend their leisure time. The third area--social and personal adjustment--is probably the most important of the three. In this area the students and teacher discuss morals and virtues, dating, marriage, family responsibility and the responsibilities of a citizen in our society. Personal problems of the students are also explored and solutions sought. These are discussed as a group, gaining greater insight and solutions from their peers; this is followed up with individual counseling with the teacher.

Additional Information:
School district: Exeter Township School District
County: Berks
Grades: 10-12

Contact person: Joseph L. Jakubowski Jr.
Exeter Senior High School
Exeter Township School District
Thirty-seventh and Woodland streets
Reading, Pa. 19606

SCIENCE--A PROCESS APPROACH

This program was initiated in an effort to determine the best possible way to install an innovative program. The particular innovative program being used is "science--a process approach" developed by the American Association for the Advancement of Science.

Although the program is in science and is quite effective in its presentation, the important thing is that teachers are trained for a new technique in teaching.

The program is initiated with a week long in-service training session conducted by the Eastern Regional Institute for Education. Experts in the science program are brought in from many places to serve as trainers. Teachers were given opportunities to discuss the ideas and teach the program.

After the training program, teachers return to their respective schools where science kits and teaching materials were forwarded. Once every two weeks, a specially trained person from the training agency meets with the teacher, discusses problems, teaches demonstration lessons and assists in any way possible. As each new lesson is taught, a sampling of three pupils is tested to determine how understanding develops.

Benefits to the local districts include:

1. Pupils receive an excellent science course utilizing the "process approach."

2. Teachers learn new ways of teaching and of evaluating student achievement in terms of behavioral objectives.

3. Definite ways to change tested elementary science teaching objectives and methods.

Teachers will continue to be trained in the same manner each year this program is continued.

Additional Information:
School district: Fairview School District
County: Erie
Grades: K-5
Pamphlet available upon request

Contact person: William Straessley
Principal
Fairview Elementary School
Fairview School District
West Chestnut Street
Fairview, Pa. 16415

DATA PROCESSING

Rapid growth in computerized data processing and the many job opportunities for trained youth in the field led Fayette County Area Vocational-Technical School to institute a program of training in data processing and programming.

Its objectives are to train students to qualify for entry level positions in commercial data processing installations.

To this end, the district has acquired facilities, equipment and staff, provided daily training and guidance and engaged in collecting and storing data.

Results after four years have shown that some students have indeed been successful in obtaining jobs that require skills, speed and accuracy which was obtained through hands on training with varied equipment.

Since student technical competency has increased, other areas of education have benefited through several "spin-off" programs. For example, academic students are now able to transfer scientific problems to data processing students via a recently acquired tele-communications system; distributive education students, business students and agricultural students can practice managerial skills through computer simulations of small businesses.

Acquiring money to keep equipment inventory up to date is a major concern and has been partially satisfied by the pooling of district resources and expansion of services.

Additional Information:
School district: Fayette County Area Vocational-Technical School
County: Fayette
Grades: 10-12 and adult

Contact person: Martin J. Alfonsi or
Michael M. Stefanik
Data Processing Instructors
Fayette County Area Vocational-Technical School
R. D. #2, Fairchance Road
Uniontown, Pa. 15401

CURRICULUM MATERIALS CENTER LISTENING ROOM

The Fleetwood Area High School curriculum materials listening room was established to provide students and faculty members with an area for small group projects and for individuals who wish to use audio-visual materials to enhance their fields of study and program planning. The room is conveniently located with easy access to the printed and audio-visual materials which are housed in the curriculum materials center.

An average of 25 to 30 students use the various listening room facilities daily. These students preschedule time and equipment to be used as part of their independent study programs and for work on special committee projects which will utilize audio-visual materials. Subject areas presently involved in extended programs are business education, science, English, social studies and Spanish. Recreational use of the radio and record player facilities has been permitted at times when it does not conflict with the prepared listening room programs.

All audio-visual hardware and software are available for students, faculty and community use. Software includes filmstrips, transparencies (commercially prepared and blank), slides, audio tapes (prepared and blank) and accessories for preparation of such materials as desired for the school district. These materials are housed in the high school and are distributed to the various buildings upon request.

Equipment housed in the listening room includes a stereo record player with AM-FM radio, a monaural-stereo reel to reel three-speed four-track tape recorder, a cassette tape recorder, a Dukane AV-matic filmstrip-record combination, a 16mm film projector, a silent super 8mm cartridge film projector and two telescreens.

With the use of headsets, the above equipment can be used simultaneously, thus enabling groups of two to eight persons to view or to listen to the same material at the same time.

Additional Information:
School district: Fleetwood Area School District
County: Berks
Grades: 9-12
Information available upon request

Contact person: Frederick M. Serfass
Superintendent
Fleetwood Area School District
North Richmond Street
Fleetwood, Pa. 19522

SURVIVAL LEARNINGS

On the assumption that the school cannot leave to chance the teaching of certain fundamentals, which may mean the difference between survival and death (or serious injury), the Fleetwood Area School District embarked on the development of a program known as "survival learnings." There is a "course of study" labeled as such in grades K-5; it is a part of the health, driver education and safety program in the secondary schools (middle and high).

Therefore, the district has incorporated a program which has as its purpose the teaching of, in a sequential fashion and appropriate to the maturity level of the student, those essentials which can mean the difference between survival and death (or serious injury). These essentials range from the simple admonition at the kindergarten level of "not getting into a stranger's car," to the control of arterial bleeding or the understanding of radioactivity.

This "survival learnings" program is an example of a cooperative effort. Community industries provide resource materials, the police chief provides his office and staff to aid in the planning and implementation and the school provides the instruction and follow-up.

Additional Information:
School district: Fleetwood Area School District
County: Berks
Grades: K-12
Pamphlet available upon request

Contact person: Frederick M. Serfass
Superintendent
Fleetwood Area School District
North Richmond Street
Fleetwood, Pa. 19522

CONTINUOUS PROGRESS PLAN

The continuous progress plan is an outgrowth of a study conducted with a group of first year pupils who lacked general readiness for a formal 1st grade program. After much deliberation, a program was formulated for these children. In this program, children progressed at their own rate, frustrations were eliminated and significant academic progress was observed. Early in the development of this "continuing group" it was apparent that a modification of the graded school was in order.

A committee was formed to study all aspects of the nongraded school organization. As a result of this committee's efforts, the Gateway School District adopted a primary unit plan whose philosophy is represented by the following statements:

1. Children differ in their rate of growth and development.
2. Provision should be made for continuous progress.
3. Children should be permitted to develop at their own rate.
4. No child should be expected to learn beyond capabilities.
5. No child should be required to wait for the slower or less mature child.
6. Children whose achievements are equal to their abilities have made satisfactory progress.
7. Children should be taught at their instructional level.

Flexible grouping, constant evaluation and continuous progress are the underlying concepts of the program. The program is carefully observed and evaluated with yearly reports submitted to the administration.

The district, in striving to meet the needs of children, adopted this philosophy of continuous progress and is committed to it in the elementary schools.

The program requires continuing curriculum study, constant review of evaluation techniques, continued research in how children learn and in-service training for the professional staff.

Additional Information:
School district: Gateway School District
County: Allegheny
Grades: 1-6
Pamphlet available upon request

Contact person: Mary R. Perry
Elementary Supervisor
Gateway School District
Moss Side Boulevard
Monroeville, Pa. 15146

MUSIC EDUCATION IN THE GATEWAY SCHOOL DISTRICT

The music program in the Gateway School District is designed to provide vital and meaningful experiences for over 7,000 music students in grades K-12. Students are grouped in 191 general music classes, 17 choirs, six bands, four orchestras, stage band and a clarinet choir. Approximately 900 students study string, brass, woodwind and percussion instruments. Thirty-three live performances by professional and college groups and Gateway students are scheduled for assembly programs throughout the system. Included is a six-week summer music program consisting of instrumental lessons and band-orchestra-choir rehearsals. Music appreciation and theory is offered during the regular school term. A three-month Saturday chorus-band-orchestra program for over 200 elementary students is also part of the program. The teaching staff consists of eight vocal and five instrumental teachers and a districtwide music coordinator.

Other features of the program include:

1. Over 400 students are enrolled in the high school vocal program.
2. In the junior high schools, chorus (five periods), band (two periods) and orchestra (three periods), are scheduled during the same period.
3. Each of the junior high schools has a boys', girls' and mixed chorus.
4. Elementary vocal music teachers teach two 20-minute periods of music a week in the primary grades and two 25-minute periods in the intermediate grades.
5. Each instrumental music teacher has majored on and teaches a different family of instruments.
6. Instrumental teachers are scheduled vertically.
7. A second teacher is assigned at all secondary bands.
8. The senior high school marching band of 135 meets every day. After football season it divides into two concert bands.
9. Second bands have been organized in the secondary schools.
10. A string program consists of over 175 players.
11. Lower pitched string and brass instruments are available in the elementary grades.
12. Junior high school bands, choirs and orchestras perform in the elementary schools; senior high school groups perform in the junior high schools.

Additional Information:

School district: Gateway School District
County: Allegheny
Grades: K-12
Pamphlet available upon request

Contact person: Louis J. DeBrozze
Music Program Coordinator
Monroeville Junior High School
Gateway School District
Old William Penn and Haymaker Road
Monroeville, Pa. 15146

A PROGRAM IN READING AND LANGUAGE ARTS

Many educationally disadvantaged children are handicapped in an academic situation, often from sociological, physical, emotional and environmental causes. The program in reading and language arts was developed to increase the educational accomplishments of disadvantaged students whose achievements were below capacity. The teachers in the program offer specialized instruction for students in need of such services. A staff of seven teachers service the elementary schools of the school district. Originally the program was conducted in a center and children were transported from the elementary schools. After evaluating this procedure, it was decided to have the teachers housed in the local buildings.

Basic premises of the program include improvement of the children's self-image, enrichment of their background and experiences and improvement of their word attack skills. Increased comprehension and interpretation of reading are the goals. Individual specialized instruction is given according to need, and there is continuous diagnosis of reading difficulties. An attempt is made to stimulate and enhance listening, speaking and writing skills and to create more desire to read and communicate. Faulty work habits are improved, and the students are helped toward more academic success by gaining in ability to transfer newly acquired skills into the content areas of the regular school curriculum. The program recognizes basic needs around which opportunity for growth and progress are clustered in an academic setting.

Student and parent interest in the program is encouraging, and some students have shown evidence of improvement. Continuous evaluation is performed, and a written subjective record is available to regular classroom teachers and parents.

Additional Information:
School district: Gateway School District
County: Allegheny
Grades: 1-6

Contact person: Mary R. Perry
Elementary Supervisor
Gateway School District
Moss Side Boulevard
Monroeville, Pa. 15146

RESOURCE TEACHER PROGRAM

The resource teacher program was inaugurated to assist the regular classroom teachers in providing the best possible education for all students.

Resource teachers are full-time members of the teaching staff who work with children anywhere on the educational continuum. They provide resource assistance and serve as consultants to classroom teachers as well as other school personnel. Seven teachers serve in this capacity on a districtwide basis.

The resource teachers' previous teaching experience has provided them with the necessary background for identifying and working with the many problems which arise in the teaching-learning process. Resource teachers utilize new ideas, procedures, techniques and materials, directed toward more effective teaching and are knowledgeable and effective in working with students and peers.

This service ranges from early detection of difficulties and the use of proper measures to eliminate the necessity for later remediation to the provision of enrichment activities for gifted children in need of motivation and additional challenge.

The resource teachers observe, establish a working relationship, prescribe, motivate and continuously evaluate those pupils or programs with whom they work.

In summary, resource teachers work with other staff members in a collaborative effort at problem solving and prevention. The main function is to promote and encourage the maximum achievement for each student by working with the learner and the teacher.

Additional Information:
School district: Gateway School District
County: Allegheny
Grades: K-6
Pamphlet available upon request

Contact person: Mary R. Perry
Elementary Supervisor
Gateway School District
Moss Side Boulevard
Monroeville, Pa. 15146

A GENERAL SCHOOL-WORK PROGRAM

This is a supplementary education service being made available through the industrial arts program at the Gettysburg Senior High School. Its purpose is to provide a gradual transition from school to employment through school-work experiences in cooperation with community resources.

It is designed for the pupil who in all probability will terminate his formal education upon graduation from high school. For children of low income families, work experience provides financial assistance. Other objectives include:

1. Supervising training so that students formulate desirable work habits (school to employment).
2. Pupil guidance and assistance in determining work adaptability.
3. Providing gradual social adjustment from formal schooling to daily work routines.
4. Providing a sampling of occupational interests before joining the labor market.
5. Providing job mobility opportunities for the graduate to function more successfully (or compete) in our industrial society.
6. Assisting the pupil to overcome detrimental or unrealistic work attitudes acquired by ethnic, family socioeconomic or geographic plight.

Additional Information:
School district: Gettysburg Area School District
County: Adams
Grades: 12

Contact Person: Dale R. Hamm
Head and Work-Study Coordinator
Industrial Arts Department
Gettysburg Area School District
Box 310
Gettysburg, Pa. 17325

REMEDIAL READING PROGRAM

The desire to help those students who are below grade level in reading prompted the development of a special reading program. This was started in the junior high school and gradually worked down through the elementary grades.

The elementary reading program begins early in the school year with the students in grades 1-6 given a screening test. The reading level derived from this, plus classroom teacher recommendations, are used as a basis to determine the groups requiring additional help. Students meet daily, usually for a 45-minute period, in small groups of from four to ten in number, with the reading teacher and teacher aides. Individual tutoring time is also scheduled when necessary.

The purpose of this program is to take students at their own reading level and have them progress as much and as rapidly as they are able. Various machines, games, books and filmstrips are used, avoiding those used in the regular classrooms. The phonetic phase of reading is stressed. A review is made of basic sounds, syllabication, word recognition for speed and accuracy and vocabulary building. Reading for pleasure is emphasized.

As soon as students are able to handle the regular classroom reading program, they leave the special reading group.

The teachers of reading, of which there are four in the elementary grades, work very closely with the school nurse who checks for possible sight or hearing loss with the county speech therapist and the county psychologist.

Additional Information:
School district: Gettysburg Area School District
County: Adams
Grades: 1-6

Contact person: Marion Ecker
Eisenhower Elementary School
Gettysburg Area School District
Gettysburg, Pa. 17325

ELK VALLEY SCHOOL NONGRADED OR CONTINUOUS PROGRESS PROGRAM

All children are born with an individual growth pattern. They differ from all other children in their physical, mental, emotional and social growth. To provide opportunities for children to develop at their own rate, a break was made from the traditional grading structure to a continuous growth program. This program is structured with 14 learning or achievement levels replacing grades 1-6. There is no imposed timing as to the rate of growth per level. Because of social background, wide variances in interests, abilities, capacities and aptitudes each child must be given materials and guidance at the instructional level, therefore, experiencing many successful experiences in school. Every student begins on level one and continues through level 14, never skipping or repeating, with a curriculum based upon individual needs.

The traditional grading system cannot be applied to the continuous progress program because a single scale does not provide a way for evaluating each student according to ability.

The district reports to the parent how well the child is achieving in relationship to ability in at least three dimensions:

1. Where is the student in progress?
2. What is the quality of performance?
3. How does this compare to what can reasonably be expected?

To report the above, a progress report is sent to the parent four times a year indicating level progress with teacher comments; however, the most important part of reporting procedures is the parent-teacher conference.

Additional Information:
School district: Girard School District
County: Erie
Grades: 1-6

Contact person: Theodore L. Davis
Elementary Supervisor
Elk Valley School
Girard School District
Maple Avenue
Lake City, Pa. 16423

FOREIGN LANGUAGES IN THE ELEMENTARY SCHOOL--FRENCH FOR EVERYONE

This French program was initiated to broaden and enrich the curriculum. By giving all elementary pupils an opportunity to participate, the program seeks to develop the skills of understanding and speaking of a second language within the limits of the pupil's vocabulary and experience. An off-shoot of this is cultural curiosity about the world and its people. Integration of foreign language in the elementary school with the junior high school permits continuity of learning. These aims are fulfilled by using aural-oral expression which is specifically accomplished by teaching the "dialogue methods" that create a proper cultural atmosphere. Some of the procedures are introducing vocabulary through identification exercises, repeating and memorizing basic dialogues, adapting dialogues, recombining narratives of words learned as a cumulative review and limiting pattern drills which follow each dialogue.

The program was initiated in the 1st grade and built upon grade by grade until the entire elementary program was encompassed. Such a project should have the assurance of continuity and materials. Materials for junior and senior high school should complement the FLES program. Some obstacles to overcome are the availability of suitable materials, qualified personnel and local costs. This program is funded by the local school district.

Additional Information:
School district: Girard School District
County: Erie
Grades: 1-6

Contact person: Theodore L. Davis
Elementary Supervisor
Girard School District
Maple Avenue
Lake City, Pa. 16423

ECONOMICS--POPULATION UNIT

The 9th grade economics classes at Governor Mifflin Junior High School are being offered a unit on population studies this year. Our major goal in presenting this unit is to acquaint the students with the current scientific knowledge and opinion about this extremely urgent world problem, the "population explosion." The importance of this topic can be easily illustrated by the example shown in a recent photography contest that awarded prizes for pictures that best illuminate the problems facing man in the 1970's. First prize was given to a photographer for a picture of a smiling family of 12. Therefore, this unit is offered in the attempt to give our students proficiency in understanding this problem. This population unit includes the following coverage:

1. History of population studies.
2. Tools used to study population.
3. Factors influencing population growth.
4. Effect of population size and composition on the economy.
5. Effect of population on the ecology of an area and the "quality of life" for its inhabitants.

Each student will finish the unit with the understanding of the basic problem of overpopulation and the possible remedies.

Additional Information:
School district: Governor Mifflin School District
County: Berks
Grades: 9

Contact person: John Gallagher
Staff Leader
Governor Mifflin Junior High School
130 E. Lancaster Ave.
Shillington, Pa. 19607

ELEMENTARY ARTS PROGRAM

The arts program, as designed by the committee for the 4th grade, deals with subject in the arts and the development of a vocabulary in the arts. Each of the four units emphasizes a particular art form and its relationship to other art forms. The names of the study units are:

1. Emphasis on Sight and Sound.
2. Emphasis on Visual Arts.
3. Emphasis on Movement.
4. Emphasis on Music.

A variety of materials including films, filmstrips, painting reproductions, sculptural reproductions, books and records are used by the classroom teacher to present each unit. Live student dance demonstrations are used as part of the "emphasis on movement" unit.

To familiarize the classroom teachers with the program and the materials, four in-service sessions were conducted before any of the units were distributed to the classrooms. Every 4th grade class has been scheduled to have each unit for approximately four weeks, giving ample opportunity for the students to become acquainted with the materials and to complete the sequence of the lessons in the unit.

Since it is virtually impossible for any one person to be expert in all areas of the arts, we encourage the teacher to develop a rapport with the students in which "we discover together," with the teacher serving as the leader. Using the inductive method, the students are led on to discovery and revelation by means of a flow of questions which deepen their perception and their personal identification with the work of art.

The results of this program must be evaluated in terms of process, rather than in terms of facts learned and concepts formulated. There are some student activities in some of the units which will provide an insight into the continuing growth of the child, but a true evaluation of this program may only be possible after a student has lived many years of his life.

It is the hope of the committee that after an evaluation of this initial series of units for the 4th grade, other units will be designed for other grade levels to enable all students to become responsive to the arts as viewed from today's point of view.

Additional Information:
School district: Governor Mifflin School District
County: Berks
Grades: 4

Contact person: Neil Haring
Staff Leader, Curriculum Center
Governor Mifflin School District
53 Chestnut St.
Mohnton, Pa. 19540

HELP EDUCATE LITTLE PEOPLE--A STUDENT HELP PROGRAM

One of the fundamental needs in a society is the recognition of man's responsibility for the welfare of his fellow man. Youth today tells us it wants to become "involved." An experimental program has been initiated at Governor Mifflin School District whereby senior high school students can become constructively involved by providing elementary students with personalized help. It is hoped that "help educate little people" will provide some of our youth with the opportunity to channel their energies into worthwhile activities and display to them the personal gratification which can be derived from helping others.

The HELP program is being coordinated by Carol Ann Beyer, a reading specialist in the elementary division. The senior high school guidance department provides the liaison between the elementary division and the senior high school. The senior high school students in this program are not necessarily prospective teachers or honor students. They are good school citizens who are willing to donate their free time for a worthwhile activity. It is felt, however, that this program will provide vocational guidance for those students who feel they may enter the teaching field or who are uncertain about a choice of careers.

The helpers go to the elementary schools during their study halls in order to aid their younger counterparts. Some of the students walk to the nearby schools, while others provide their own transportation or ride with another student to the more distant schools. One mother transports her daughter and another girl once a week. We have also had some students transported by the driver education department when there was no other means of transportation available.

The elementary classroom teachers whose students are being assisted are responsible for guiding the activities of the helpers. The help, which is provided, can take many forms. A helper may aid a child in any area of the academic curriculum, act as a "big" friend who is willing to listen to him and provide the child with a model to imitate. Two of our male helpers, a varsity wrestler and a varsity football player, have been helping two young boys who had previously been unable or unwilling to complete school tasks. The results so far have been gratifying.

Additional Information:
School district: Governor Mifflin School District
County: Berks
Grades: K-6

Contact person: Carol Ann Beyer
Reading Specialist, Governor Mifflin Curriculum Center
Governor Mifflin School District
53 Chestnut St.
Mohnton, Pa. 19540

MULTI-MEDIA RESOURCE CENTER

This elementary learning program spirals around the multi-media resource center. The center serves the teachers with a wealth of instructional materials, the students with a variety of learning experiences and the curriculum with an enriched outlook.

A large room used for library and instruction includes an electrically operated screen, a science discovery table and a public address system. The multi-media resource center has been planned for flexibility and a variety of learning experiences. Individual, small groups or large groups are easily handled in this one area. Adjacent to this large room are a workroom, office, conference room and small group instruction room. These rooms also double as listening and viewing stations for students.

Materials are used in the center and in the individual classrooms. Teachers are encouraged to examine and select materials for classroom use during library visits. New acquisitions are displayed and these are called to the attention of the teacher. Conferences are arranged with the librarian to plan units or set up programs for individual students and small groups. The center is open continuously throughout the day with flexible scheduling, enabling teachers and students to use the facilities whenever the need arises.

Many people are involved in the operation of the learning center. A librarian is the director and is assisted by part-time secretarial help. A volunteer staff of 30 PTA mothers relieves the librarian of most of the routine duties. There are also eight student teams who volunteer a few minutes daily before school, during recess, at lunch time and after school. Chores for these students are varied; this is a learning experience for them as well as additional help to the librarian.

This learning center generates excitement, motivates pupils and promotes reading. Students who are out of step in their classroom can find help in the center. Older students help younger ones. Audio and visual experiences reinforce textbook learning. A book talk by students assumes a glamorous dimension when conducted with the public address system. Very young children learn adeptness in handling equipment. Learners become actively involved with their own learning there in the center.

Additional Information:
School district: Governor Mifflin School District
County: Berks
Grades: K-6

Contact person: Doris Rosenberger
Librarian
Governor Mifflin School District
R. D. #2
Mohnton, Pa. 19540

INDIVIDUALIZED PRESCRIBED INSTRUCTION PROGRAM

The emphasis of education in the past few years in schools has been to present a program that brings forth the opportunity for individualizing and humanizing education for all school children. To this end the Greater Johnstown School District has introduced "individually prescribed instruction" into its program as an educational endeavor to provide for the wide range of differences that exist in any classroom. Individually prescribed instruction consists of planning and conducting with each student a program of studies in a subject that is tailored to the student's individual needs.

The district's philosophy of education does not change with the introduction of individualized prescribed instruction. The individually prescribed instruction "vehicle" is just another way of trying to develop more learning experiences and understanding of the philosophy and goals that currently exist in the traditional program.

Initial primary concern was the development of methods and techniques unique to the individualized prescribed instructional approach on the elementary level. The new elementary building has been constructed specifically to house such a program. This will be the first attempt of the Greater Johnstown School District to develop a facility for a specific type of educational program. The district staff is of the opinion that the new facility can be utilized most effectively over a 12-month period. This, in fact, will create greater financial savings, be more economical, insure better teacher salaries (longer teacher terms), better educational facilities for more students and a sounder educational program for students.

The new elementary building was officially opened on January 20, 1971.

A good daily schedule under individualized prescribed instruction does not stifle the interest of children nor the initiative of teachers; it is the framework in which pupils and teachers work happily, creatively and efficiently.

The daily program should allow for emergencies and special occasions, such as embedded breaks. Abnormal incidents of activities will provide worthwhile learning situations while interest is high.

A flexible program, however, does not eliminate planning. A teacher must plan better and have more "at the fingertips" for a flexible program than for a rigid one.

Additional Information:
School district: Greater Johnstown School District
County: Cambria
Grades: 1-12

Contact person: S. Tony Carosella
Assistant to the Superintendent
Greater Johnstown School District
729 Wood St.
Johnstown, Pa. 15902

AN OUTDOOR BIOLOGICAL LABORATORY

Operating on the premise that a quality education extends learning beyond the limitations of the text and the confines of the classroom, and to provide for individual learning--a program was designed to provide not only the resources but also the active guidance to the students. The students are afforded the opportunity to explore, discover and understand their surrounding natural resources. The students are then able to see the close relationship between the theory that is received in the classroom, and the practicum that is received in the greenhouse, landscaping and outdoor laboratory on the wooded hillside adjacent to the school.

The idea for this program emanated from a landscape committee meeting which had for its purpose the supplying of shrubs and trees for the area surrounding the building. The program encouraged the active participation of industry, service organizations, parents, teachers, maintenance and school administration. The purpose then developed into an effort to inculcate values of the natural environment as part of the existing school program. The plan basically includes several areas of development. Field-oriented activities are developed and double laboratory periods have been approved to make it possible to take the students on field trips to the outdoor laboratory.

The aid by the community has been unending: (1) The soil conservationist studied the area with a service organization planning nature trails over a tract of land, (2) the Botanical Society assists in identifying plants and a nature brochure is available to students and visitors, (3) through the efforts of the local school board, a pond has been acquired, (4) a service organization, assisted by biology students, has planted 200 trees, (5) close work has been done with a local landscape architect and (6) greenhouse operators provide seed and soil for use in the greenhouse. Plants are then grown in the greenhouse and placed on the mall around the building for aesthetic beauty.

Through the development of an appreciation and understanding of nature, the program benefits both the student and the community.

Additional Information:
School district: Greater Latrobe School District
County: Westmoreland
Grade: 10
Pamphlet available upon request

Contact person: Virginia A. Daniels
Greater Latrobe School District
Box 452
Latrobe, Pa. 15650

KNOWING YOURSELF: MENTAL AND PHYSICAL HEALTH IN THE ELEMENTARY SCHOOL

School children are growing in a world of rapid change, particularly in the areas of technology and value structures. If a child is unable to adjust, an escape will likely be sought.

Knowing Yourself,[1] a course of study in mental and physical health, was written with the belief that people who understand themselves can more easily adjust within society and are better able to understand others.

The program is based on 25 concepts in a spiral approach involving grades 1-6. Conceptual areas include developing a positive self-concept, exploring personal values, understanding family relationships, understanding proper drug use and studying the healthy body. Concepts are introduced in the primary grades and reinforced in the intermediate grades.

The program is behaviorally oriented, utilizing the inquiry approach on the part of the student. Children conduct their own discussions of personal experiences and problems, offer suggestions to modify future behavior and analyze themselves. Proper drug use and the maintenance of a healthy body are emphasized as another possible method of preventing drug abuse.

Knowing Yourself has been correlated and integrated into all subject areas, textbooks and audio-visual materials in the elementary curriculum. The manual for teachers presents concepts, content and suggested learning activities.

Evaluation of the program is conducted through observation of the change in behavior and attitudes of the pupils. Knowing Yourself is continually being expanded and modified to meet the rapid changes in society and the changing needs of the children.

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[1] Knowing Yourself by Marsha Martin and Joan Miller. Copyright 1970.

Additional Information:
School district: Hamburg Area School District
County: Berks
Grades: 1-6

Contact persons: Marsha Martin
705 Tilghman St.
Coopersburg, Pa. 18036

Joan Miller
Dakota Wesleyan University
Mitchell, S. D. 57301

TRAINING TOMORROW'S OFFICE WORKERS

This business education department attempts to develop salable skills for entry work. Students are screened and frequently counseled. Specialization in typewriting, shorthand and bookkeeping is initiated at the 11th grade level. Wherever possible, schedules are individualized to meet the student's needs with reference to future training and/or employment.

Instruction outcomes are enhanced by the use of many audio-visual aids. Multiple-listening stations, shorthand dictation records, job training records, overhead projectors and films are common sights in classes. Practice sets and/or workbooks and wall charts are used in all classes. Each grade takes one field trip yearly. Cooperating closely with the state, civil service typist and stenography tests are given on school premises. On-the-job training is provided to senior students via the work-experience program.

The business department has an annual parents' orientation night, which enables close contact with parents and students for vocational and educational planning. Working in close cooperation with its advisory committee, the department can always plan and work for greatest benefits for the students and employers alike.

Additional Informantion:
School district: Hamburg Area School District
County: Berks
Grades: 10-12
Pamphlet available upon request

Contact person: Vera B. Nice
Chairman, Business Education Department
Hamburg Area School District
Windsor Street
Hamburg, Pa. 19526

RELIGIOUS LITERATURE OF THE WEST

The course in religious literature of the west offers the student an opportunity to learn in some detail of event and depth of meaning the dramatic experience with God which the classical literature of Judaism, Christianity and Islam presents to the world.

The literature includes the Hebrew Bible and the writing stemming from it--the Apocrypha, Pseudopigrapha and the Rabbinics. The literature of the Christian and Islam faiths is drawn mainly from the New Testament and Qur'an respectively.

In the process of the students' growing experience with these traditional writings, it is hoped that certain of their skills in understanding and appreciating culture forming literature such as this will be developed. Other literature repeatedly points to it and draws from it as a basic well-spring of reference. Hopefully students will learn increasingly to identify the great people and events which illuminate so greatly the subsequent literature of western culture. Perhaps most important, one should listen in this course with a compassionate ear to the concords and discords in both ancient and contemporary experiences as one who counts his or her own life as fully involved in the community of all human experience.

Whether this is a course in literature or religion may be answered by saying that the reading is generally regarded as literature and the content is human experience of a religious nature. The student may read this literature as the very words of God or as a truly human record of ideas and events. It may be read as both or as neither. Whatever the student's attitude may be toward these writings, they are offered as accounts of intensely religious human experiences, as literature rich in universal meaning and hence as accounts eminently worthy of learning and appreciation.

Additional Information:
School district: Hanover Borough School District
County: York
Grades: 1-12

Contact person: Richard L. McCool
Principal
Hanover High School
Hanover Borough School District
401 Moul Ave.
Hanover, Pa. 17331

INDEPENDENT STUDY PROGRAM

With the emphasis on innovation of recent years in mind, this district instituted a program of independent study for the mentally gifted in the Hopewell High School. This project is designed to provide real opportunities for mentally able students to work independently and to become more proficient in study free from the rigid structure and restrictions of a formal classroom. The students are surrounded with diversified resources, and materials are available to students to assist them in their independent pursuits. Study carrels, listening devices, paperback books, filmstrips, etc., constitute a vital role in their efforts.

Independent study courses are available to 11th and 12th grade students recommended for the project. The program is available in the following areas: chemistry, English, mathematics, French, social studies and biology.

The identification and selection of mentally gifted pupils is based upon cumulative evidence provided by standardized group tests, classroom performance and teacher judgment. Such evidence is used to provide the initial screening to select those students who may be eligible for inclusion in the program. Final selection for participation is made upon recommendations based upon the following evidence:

1. Superior intellectual ability--IQ of 130 and above, or less with special consideration. The evidence required for selection is obtained from teacher observations, school records and personal interviews with individual pupils and parents. Final selection is the responsibility of the high school principal.

2. High potential for high achievement.

3. Adequate emotional and social maturity for chronological age.

4. An unusual talent in a specific area or areas.

5. Sufficient motivation and interest to benefit from the program.

6. A high level of originality and/or creativity.

7. Pupil and parent willingness to participate in the program.

The selected students constitute two per cent of the senior high school enrollment of 1,200.

INDEPENDENT STUDY PROGRAM (Cont'd.)

Additional Information:
School district: Hopewell Area School District
County: Beaver
Grades: 11-12

Contact person: Steve J. Mulik
Assistant Superintendent
Hopewell Area School District
1215 Longvue Ave.
Aliquippa, Pa. 15001

MATHEMATICS LABORATORY

The mathematics laboratory was developed to identify underachievers in mathematics early in a course and to provide facilities to stimulate interest in the subject.

The laboratory is equipped with an electronic communications system. The teacher asks a multiple choice question and the students respond by pressing a button on their desk. The console of the system informs the teacher of the correct responses of the class, which assists the teacher in evaluating the presentation. In addition the teacher can assign values to each question and the cumulative result is recorded on the console, giving the teacher an evaluation of each student at the end of the period. There is a panel in which a light shines through a seating chart. When a button on the panel is pressed, the teacher identifies the answer given by each student for each question, enabling the teacher to give immediate remedial help to those who responded incorrectly. The system can also be used to present audio-visual aid by means of magnetic tape, motion picture and film strip projectors.

In addition to the communications system, the laboratory is equipped with models and visual aids, mechanical calculators, an electronic calculator and a teletypewriter connected to a computer in the Altoona High School. These aids help the students see abstract concepts, eliminate the need to do laborious calculations and learn computer training.

The student using the laboratory shows more enthusiasm for the study of mathematics. In the three years of operation, all students using the laboratory have passed the mathematics course in which they were enrolled. An experiment was conducted with a class of general mathematics students at the opening of the laboratory. During the first six weeks the laboratory was not used, and a failure rate of 20 per cent was noted. During the second six weeks the students moved to the laboratory and there were no failing grades for that period. A control class taking the same course outside the laboratory had approximately the same failing rate for the same six-week period that was experienced in similar classes prior to the installation of the mathematics laboratory.

Additional Information:
School district: Huntingdon Area School District
County: Huntingdon
Grades: 9-12

Contact person: John O. Rittenhouse Jr.
Head, Department of Mathematics
Huntingdon Area School District
Twenty-fourth and Cassady Avenue
Huntingdon, Pa. 16652

MODERN VOCATIONAL AGRICULTURE FACILITIES

This program in vocational agriculture was initiated because a number of students were interested in agriculture and a need was felt for this instruction in this field. Along with the teaching of agricultural theory, the organization and operation of a Future Farmers of America Chapter and the visiting of home projects constitutes the major portion of this program. Besides providing the environment for progress in agriculture, the course also extends guidance and counseling to develop students' needs and interest. In the theory aspect of this program, emphasis is placed on public speaking, parliamentary ability, manners, grooming, dress and the development of a well-rounded personality.

With the changing trends of off-farm occupations in agriculture becoming more important yearly, emphasis is being placed on horticulture, agricultural business and agricultural resources. In addition to the regular full-time teacher of agriculture, a well qualified horticulturist teaches one full day every other week of landscape design, building and grounds maintenance and general nursery practice to the students in this department.

The course content of the vocational agriculture department at the Indiana Area High School is closely tied in with class interest. Students residing on farms are still given an intensive course in production agriculture. Those who live in and about Indiana Borough and White Township are taught those skills and knowledges needed to accept jobs in the agriculture industry or to prepare them for advanced work in institutions of higher learning.

Recently a school nursery and grass turf plots have been established to give students practical experience in working in these areas and supply school grounds in the area with ornamental nursery stock for landscaping.

Also added in the past year is an intensive agricultural mechanics program with experience in masonry construction, small gasoline engine repair, house wiring and expansion of oxy-acetylene and electric welding programs.

The building facilities in this school are near ideal for this type of instruction in agriculture; however, a greenhouse facility would add greatly to the total program. This program is financed by local and federal funds.

Additional Information:
School district: Indiana Area School District
County: Indiana
Grades: 9-12

Contact person: John Kimmel
Vocational Agriculture Instructor
Indiana Area School District
450 N. Fifth St.
Indiana, Pa. 15701

MODERN VOCATIONAL AGRICULTURE FACILITIES (Cont'd.)

Contact person: Richard J. Jones
Director of Secondary Education
Indiana Area School District
501 East Pike
Indiana, Pa. 15701

TEAM PLANNING FOR MULTI-TECHNIQUE ELEMENTARY DEMONSTRATION TEACHING

This program is a plan of school organization which is designed to capture the most valuable tenets of team teaching, nongrading and the self-contained classroom. Experts on team teaching, such as Davis, Shaplin, Bair and Dufay as well as experienced teachers have generally agreed that team planning is the aspect of team teaching that has the most to contribute to the improvement of education. This program stresses team planning in all curriculum areas. Programs are implemented through team planning for large group instruction, small group instruction and independent study programs.

The outstanding feature of the nongraded school is the opportunity which it provides for students to progress according to their achievement and ability. This program eliminates grade levels and establishes three units of organization. These three units replace traditional grade levels. Within each unit, experience levels based on child growth and development patterns determine placement. These are as follows:

Units	Experience Levels	Traditional Grade Levels
Primary Unit	5, 6 and 7	K-2
Middle Unit	8 and 9	3-4
Intermediate Unit	10 and 11	5-6

Students move through these experience level units according to their own rates of achievement.

The term "planned continuous advancement" has been coined to relay to the reader the emphasis on planning in team teaching and the opportunity for continuous advancement in the nongraded plan of organization. These two areas of emphasis were added to an excellent existing self-contained classroom plan of organization to produce the project as it now exists.

The junior high school program, now in its second year of operation, has developed a new philosophy that approaches the individualization of instruction for students by means of the use of team teaching, flexible schedules, varied-sized teaching groups and total staff effort. Child-centered horizontal team structure and subject matter vertical teams are attempting to develop each individual according to his or her interests, needs, abilities and talents.

TEAM PLANNING FOR MULTI-TECHNIQUE ELEMENTARY DEMONSTRATION TEACHING (Cont'd.)

Additional Information:
School district: Indiana Area School District
County: Indiana
Grades: K-6

Contact person: David H. Laird
Director of Elementary Education
Indiana Area School District
501 E. Pike
Indiana, Pa. 15701

BSCS BIOLOGY
PROGRAM DESCRIPTION -SPECIAL MATERIALS

Most school districts realized that no one course of study in biology will meet the needs of all students. With this in mind, BSCS staff planned and wrote a course of study for the "slow-learner" and in 1965 one class was tested in this program. The following year the course was broadened to include all "slow-learner" groups.

The method of presentation is strongly oriented toward laboratory activity, with a minimum of textbook material. The basic design of the course follows the BSCS Patterns and Processes, with teacher adaptations in areas which meet the needs of the particular class being taught. Emphasis is placed upon the actual "doing" of science rather than the reading about it. The laboratory experiments are structured so the students uncover the basic biological principles with which they will be most involved during their lifetime.

The main objective of the program is to have the students realize success. For some of these students, it may be the first time they have achieved success in an academic course. The interaction of pupil and teacher is maintained at a high level. The students are stimulated to bring their ideas to class and discuss their opinions with both peers and teacher. Individual teacher help is provided to all students and the members of the class are encouraged to help one another. Class size should be kept small so that these objectives can be realized.

Additional Information:
School district: Kennett Consolidated School District
County: Chester
Grades: 10

Contact person: Robert Bardoulay
Kennett Consolidated School District
S. Union St.
Kennett Square, Pa. 19348

MIDDLE SCHOOL PROGRAM

The organization of the school is guidance oriented. Grade level interdisciplinary teams meet with the guidance counselor weekly in order to provide continuous communication. One conference period weekly is built into each teacher's schedule to provide for student-teacher conferences.

The time allocated for most subjects in the curriculum exceeds the minimum prescribed by the Department of Education. This is especially true for science, mathematics, social studies, language arts, music and art. Linguistics has been adopted for grade 6 with grade 7 and 8 receiving limited instruction in this area of language arts. Laboratory oriented life science is taught in grade 7 followed by physical science in grade 8. Modern materials in mathematics are used in all grades. European culture is provided in each grade by an exchange teacher from Germany. A carefully planned program of physical education has been developed which includes required physical education and intramurals for all students plus noontime and after school physical recreation.

Band and chorus participation is provided during the school day for interested students in grades 6, 7 and 8.

A well organized comprehensive club program is provided twice weekly during school time for all 7th and 8th grade students.

Additional Information:
School district: Lampeter-Strasburg School District
County: Lancaster
Grades: 6-8
Pamphlet available upon request

Contact person: George W. Myers
Principal
Martin Meylin Junior High School
Lampeter-Strasburg School District
Lampeter, Pa. 17537

OUTDOOR SCHOOL--7TH GRADE

Some of the purposes of the outdoor school are to promote conservation, provide experiences that can contribute to a more worthy use of leisure time and to provide some basic instruction in outdoor living.

The students are transported by school bus to and from a local park each day for a two-day period of instruction. They are divided into sections of 15 to 18 pupils and move from one instructional station to another every 45 minutes so that they participate in every area of instruction by the end of the second day.

Instructional activities during the past four years have included:

1. Forestry--An explanation of fire prevention techniques and a demonstration of forest fire fighting procedures.
2. Soil conservation--Familiarization with the objectives of the soil conservation service and with the tools and procedures used to construct field contours. Identification of the portions of a soil profile.
3. Rifle marksmanship--A brief introduction to the rifle, some safety precautions and sighting and aiming exercises.
4. Lawn games--Introduction to and experience in playing badminton, quaits and horseshoes.
5. Golf--An introduction to golf and experience in the use of a golf club.
6. Archery--An introduction to archery and experience with the bow and arrow.
7. Art--Landscape drawing and painting.
8. Fishing techniques--Familiarization with fly and spin casting equipment and techniques.
9. Song fest--Participation in the singing of songs appropriate for the out-of-doors.
10. Compass reading--Practice in the use of the lensatic compass to negotiate a prescribed compass course.
11. Outdoor shelter--Experience in pitching tents and using field expedients to provide temporary shelter.
12. Woodmanship--Safe techniques in the use of an axe and experience in chopping wood.
13. Field mathematics--Practical exercises in the utilization of handmade transits to plot areas on the ground.

Additional Information:
School district: Lampeter-Strasburg School District
County: Lancaster
Grade: 7
Pamphlet available upon request

Contact person: George W. Myers
Principal
Martin Meylin Junior High School
Lampeter-Strasburg School District
Lampeter, Pa. 17537

SAFETY EDUCATION AND SAFETY LEAGUE

An all-encompassing interest in the myriad facets of safety generally (and on wheels, specifically) by one teacher has developed this program to such an extent that it has received the annual Governor's Award for Contribution to Traffic Safety three times. Edmund J. Jeddic, safety education coordinator, teaches safety education in large group classes, provides behind-the-wheel instruction to 150 students each year, and directs the safety education league activities. A primary function of the program is to promote all phases of safety through education. The safety league, a group of junior and senior students (about one-half of each class), translates the goals into practice in various ways. Members create posters, newsletters and original safety stories--"Spunky and Spanky Bears"--for elementary children. Pamphlets--written, illustrated and typed--by the students range from "A Guide to Sledding" to "Defensive Driving" to "Once Upon a Bicycle." Although the league meets but twice a year, student activities have received national awards or commendations from the National Student Traffic Safety Program for the past eight years. Members assist with routine duties in school corridors and parking lot. Two leaguers ride each school bus to assist both driver and passengers. Student membership in the league is voluntary, receives no extra credit and requires that participants work on their own time.

All of the activities emphasize the goals of teaching appreciation of the necessity of and for rules and regulations, those specific regulations that will help to prevent accidents and a sense of personal and social responsibility for the common welfare of everyone.

Additional Information:
School district: Lampeter-Strasburg School District
County: Lancaster
Grades: K-12
Pamphlet available upon request

Contact person: Edmund J. Jeddic
Safety Education Coordinator
Lampeter-Strasburg School District
Lampeter, Pa. 17537

SCREENING FOR KINDERGARTEN

The Gessell developmental examination is used to screen all children eligible for kindergarten. To be eligible, a child must become five on or before November 1 of the year he is to enter kindergarten.

Children whose scores fall within the 4½ to 5 developmental age range are accepted for the incoming class. The screening examination is administered individually to each child by a specially trained examiner in the presence of the parent or parents. A short conference is held with the parent following the examination just to discuss how the child seemed to perform. The final evaluation of the test is made later and the parents informed by mail. Any parent who so desires may come in to have the test gone over in detail.

Because this screening test reveals the behavioral age of the child, it is possible to bring children into school when they are developmentally ready to cope with it. Children who are ready find school a place where they can be successful and happy.

Additional Information:
School district: Lampeter-Strasburg School District
County: Lancaster
Grades: K-5

Contact person: Mary S. Strickler
Director of Elementary Education
Lampeter-Strasburg School District
Lampeter, Pa. 17537

SELECTION OF CHILDREN FOR PREFIRST

All kindergarten children who score low on the group readiness test given in May plus those children about whom the teachers have questions are given the full form of the Gessell developmental examination. For those whose test score falls within the 5 to 5½ developmental age range, a conference is arranged with the parents to explain the value of an added year of readiness. When and only when the parents are agreed is the child assigned to prefirst.

All children who have not attended kindergarten are automatically assigned to prefirst. If any of these children show unusual readiness after the first few weeks of orientation to school, they are then given the Gessell developmental examination. If they make a 6 developmental age score, they are then reassigned to regular 1st grade.

Additional Information:
School district: Lampeter-Strasburg School District
County: Lancaster
Grades: K-5

Contact person: Mary S. Strickler
Director of Elementary Education
Lampeter-Strasburg School District
Lampeter, Pa. 17537

TEAM TEACHING

Seven 6th grade sections are divided into two teams with four teachers on one team and three on the other. Within each team, students are grouped homogeneously for language arts and mathematics. Each morning they are regrouped for 90 minutes of language arts and each afternoon they are regrouped for 45 minutes of mathematics. The remainder of the day they are with their homeroom teacher where they are grouped heterogeneously. Each team meets once per week during the school day with the librarian and counselor in attendance. The team leader chairs the meeting which provides an opportunity for coordination among all staff present. It also enables the team to plan for the adjustment of class time, integration of subject matter, occasional large group instruction and the development of special projects.

The 7th and 8th grades are organized into interdisciplinary teams of four teachers each with one teacher from each of the following subjects: language arts, social studies, science and mathematics. Each team, under the direction of a team leader, meets twice weekly to coordinate instruction; plan large group instruction, field trips and special projects; discuss student progress; meet with parents and consider any other matters that may affect the team. The principal, guidance counselor, librarian and reading teacher attend one or more meetings each week. Large group instruction with classes of approximately 30 students dominate the schedule; however, small group instruction is given in each subject once per week for all students. The length of time for standard size classes and large group instruction classes can be expanded or compressed at the option of each team.

Additional Information:
School district: Lampeter-Strasburg School District
County: Lancaster
Grades: 7-8
Pamphlet available upon request

Contact person: George W. Myers
Principal
Martin Meylin Junior High School
Lampeter-Strasburg School District
Lampeter, Pa. 17537

CONTINUOUS RUSSIAN LANGUAGE PROGRAM FOR GRADES 5-12

A consideration of the importance of Russian in world and national affairs led to the inception of the program. It was begun in the elementary grades because of the belief that students should begin learning a foreign language as soon as possible. The program began as an experimental evening pilot course for selected students of five county high schools. The following year three schools offered the course, sharing a traveling teacher. Interest soon increased so that the subsequent year the individual schools hired their own teacher. The elementary school course evolved from experimental after-school classes for selected pupils in grades 5 and 6.

Both the elementary and secondary programs are supervised by one teacher to insure articulation, coordination and sequential order. Through uninterrupted instruction and exposure, the students learn to speak in Russian rather than about Russian. Attempts are made to have the students acquire a reasonably correct pronunciation, to develop an understanding of spoken Russian and to develop enough vocabulary and language structure patterns to enable them to express their thoughts in average Russian conversation and in writing. The elementary program familiarizes the students with the Russian alphabet and develops listening and speaking skills. Reading and writing skills are more fully developed on the secondary level, which utilizes the audio-lingual approach with stress on grammatical principles.

Since the program's initiation, an increasing number of its students have continued their study of Russian in college.

Additional Information:
School district: Leechburg Area School District
County: Armstrong
Grades: 5-12

Contact person: Joseph Mniszak
Leechburg Area School District
Siberian Avenue
Leechburg, Pa. 15656

CONCEPTS AND INQUIRY--FOURTH AND FIFTH LEVELS

The social studies program in the Lower Moreland School District for the fourth and fifth levels is called "concepts and inquiry" produced by Educational Research Council and published by Allyn and Bacon, Inc. This is a broad-based program with an interdisciplinary approach. It concentrates on developing concepts through the application of inquiry. The children form and test hypotheses, then apply their knowledge to new situations. By emphasizing conceptual learning and the inquiry approach, the program encourages the student to acquire basic understandings that enable him to analyze and interpret facts and events about man and his world.

The fourth level is divided into two sections--The Story of Agriculture and The Story of Industry. The first section shows various methods of food production and distribution and how it affects the people of the world. The second section tells the story of the industrial revolution and leads up to the mass production techniques of our factories today. The studies of agriculture and industry are then focused to a particular land area and in the 4th grade it is India: A Society in Transition.

At the fifth level, there are four sections. The first section is Ancient Civilization which is an in-depth study of Sumerian culture. Section two, Four World Views, centers on four very different styles of civilization as developed in China, India, Israel and Greece by the Sixth Century B.C. Greek and Roman civilizations are covered in section three emphasizing the influence of these civilizations on our western culture. Section four, Medieval Civilization, concerns itself with Islam, Arabia, Muhammad, Muslim empires, African kingdoms, Latin Christendom and the Mongols. Also there is an area study of the Middle East to permit the application of conceptual analysis to a specific region.

Additional Information:
School district: Lower Moreland Township School District
County: Montgomery
Grades: 4-5

Contact person: Jack Stanton
Principal, Red Lion Road School
Lower Moreland Township School District
625 Red Lion Road
Huntingdon Valley, Pa. 19006

PLANETARIUM PROGRAM

The planetarium program in the Lower Moreland School District was initiated last year with the acquisition of a new Spitz A-3p, prime sky, instrument. The program K-8 is a sequential program which has been carefully coordinated with the individual level of instruction in the classroom. Lessons vary in length from 15 minutes for the kindergarten to one hour for the 8th grade.

In grades K-5 the actual planetarium lesson is preceded by a "prelesson." The purpose of the "prelesson" is to evaluate the level of instruction that has been reached in the class in order to make the most effective use of planetarium time. The purpose of the follow-up is both to evaluate the effectiveness of the planetarium presentation and to answer any questions that have arisen as a result of this lesson. Both the "prelesson" and the "follow-up" are provided by the planetarium director in the individual classrooms.

In grade 7 experimentation is the effective use of the planetarium in the study of the Princeton Project, "Time, Space and Matter." Since this is basically a discovery type approach, the students will normally make observations in the planetarium and return to the classroom with their teacher to discuss their conclusions.

In grade 8, where earth-space science is being taught, the planetarium is used not only to make observations but also calculations in order to arrive at conclusions. Although the formal ESCP program is not taught, the observations and calculations are primarily of the same nature as the suggested ESCP observations.

There is a great need for constant correlation with the classroom teacher in these experiments.

Additional Information:
School district: Lower Moreland Township School District
County: Montgomery
Grades: K-8
Pamphlet available upon request

Contact person: John Richardson
Planetarium Director
Lower Moreland Township School District
555 Red Lion Road
Huntingdon Valley, Pa. 19006

SOCIAL STUDIES PROGRAM

In keeping with the changing times, the social studies department of Lower Moreland High School has recently undergone a revision which should better meet the needs of the students and, at the same time, broaden the scope of the entire social studies program.

Essentially, the previous program has been adjusted by moving the world cultures course from 10th to 9th grade, the course in American history from 11th to 10th grade and offering semester courses in economics and political science in grade 11. Political geography and modern European history, previously taught in grade 9, have been incorporated in the world cultures course or offered as electives.

The entire senior year will now consist of 19 elective courses, each of which will be one semester in length. These elective courses, which are open also to juniors who can schedule them, include anthropology, comparative political systems, consumer education, international relations, economics, psychology, sociology, the Negro in American history, current affairs and honors American history, to name a few.

Although the students are required to take a course in social studies in each of their four years in senior high school, the 12th grade course offers the opportunity for the student to specialize somewhat by taking a minimum of two and a maximum of four electives during the senior year. These elective courses should have significant value for the students, as they have had the introductory courses which established a strong foundation in social studies during the first three years in high school.

Additional Information:
School district: Lower Moreland Township School District
County: Montgomery
Grades: 9-12
Curriculum guides available

Contact person: Samuel A. Clay, Chairman
Social Studies Department
Lower Moreland Township School District
555 Red Lion Road
Huntingdon Valley, Pa. 19006

LARGE GROUP SESSIONS FOR WORLD CULTURES

The use of large group instruction as part of a team teaching program provides the opportunity for certain benefits that cannot always be realized by all students in regular classroom sections. In an auditorium setting, it is possible to stage a production bringing into play a wide variety of communicative media. More students are exposed to the specialized talents of various instructors. The teachers of the world cultures team deliver the majority of the lectures, but teachers from other academic areas (i.e. art, music, foreign languages, etc.) can be valuable contributors to the program. Resource persons from the cultural area being studied may be guest lecturers in the auditorium sessions resulting in a primary source exposure to several hundred students.

Intensive planning, variety and creativity are essential ingredients in the success of the program. Approaches include:

1. Students enter the auditorium to the strains of indigenous mood music from the cultural area being studied.
2. The lecture is structured on a limited number of well-developed points. It must appeal to the students and cannot be overly scholarly, stuffy or data cluttered. Lectures are essentially expository but should leave some unanswered questions fixed in the student's mind in order to have a stimulating follow-up session.
3. Varied audio-visual materials are utilized to present broad cultural concepts.

Large group sessions in themselves do not constitute an entire program. They are simply a part of it; small group follow-up sessions are equally important.

The most essential ingredients for large group instruction are teachers who are capable and desirous of conducting such a program. They must have the equipment with which to work and the imagination to use it toward an effective educational end.

Additional Information:
School district: Manheim Township School District
County: Lancaster
Grade: 11

Contact person: Paul L. Wenrich or John W. Newell
Teachers of World Cultures
Manheim Township School District
Neffsville, Pa. 17556

VOCATIONAL AGRICULTURE--YOUNG FARMER

The vocational agriculture day program was initiated by the school board that cooperated with the county supervisor in providing a practical program for the community. The adult education course began with veterans training in 1946. An adult education instructor, one of the first in the state, was hired in 1954. School officials stress that they are "surveying a well-organized, smooth running, multiple-teacher program" with this project that emphasizes knowledge, attitudes and skills, as well as providing an opportunity to keep abreast of new agricultural technology. The program also strives to develop character, personality, citizenship and patriotism, in addition to encouraging conversation. To achieve these goals, students receive on-the-job instruction, participate in local, state and national organizations and learn opportunities in agriculture occupations other than farming, including--but not limited to--welding, agricultural salesmanship, interview and horticulture.

1. The day program has been enriched with funds provided for disadvantaged and handicapped.

   The all day instructor has conducted a three-hour adult furniture class, once a week from 7 p.m. to 10 p.m. from October to April for the past two years.

2. Instruction in trade skills has been added to the young farmer program. The classes are designed to enable individuals to make emergency repairs and installations on their farm. Areas included are welding, basic carpentry, masonry, plumbing and basic electricity.

Experience with the present program indicates several needs to be established for those interested in a similar program. These suggestions are several acres of good soil for experimental purposes such as nursery, field and garden crops and a separate building for farm equipment.

The program of evening classes for young farmers is planned by a local young farmers association. Specialists participate to improve and expand the program, but most of the classes are taught by the local teacher or the young farmers themselves.

Individual on-the-farm instruction is given on a regular daytime basis.

Being affiliated with the state and national young farmers association provides opportunities for more leadership training experience.

VOCATIONAL AGRICULTURE--YOUNG FARMER (Cont'd.)

Additional Information:
School district: Marion Center Area School District
County: Indiana
Grades: 9-12 and adult

Contact person: Robert E. Steffy
Head Teacher, Vocational Agricultural Program
Marion Center Area School District
Marion Center, Pa. 15759

ART PROGRAM

Art education means many things to many people. It therefore calls for a specific definition and direction as relative to its particular educational situation. The art program at Marple Newtown is based on the art education philosophy that such a program is an integral aspect of the total contemporary educational picture. The main characteristic of such a philosophy lies in its viewpoint that the average high school student should not always be regarded as a potential artist, but rather as a potential art appreciater--that aesthetic creativity takes place with the brush as well as with the mind.

Those who are endowed with an inherent aesthetic ability to be expressive in a graphic and plastic sense are encouraged to seek the studio art courses. The art program does not concern itself with an "art-for-therapy-sake" attitude, but rather increases its emphasis upon art as a "fine art" as seen against a direct or indirect utilitarian or decorative arts and crafts philosophy.

In the high school (10-12) the total program is basically two-track in its offered directions: an elective course in studio art (1,2,3) and/or elective courses in art appreciation (*1,2,3,4).
*Every student is required to take the art appreciation "1" course. A satisfactory completion of the course is a prerequisite for any student desiring to elect any other art appreciation course.

The art curriculum in grades 7, 8 and 9 has been planned so appreciative and studio aspects of the art program receive equal emphasis. Five major areas in the studio art are covered: drawing, painting, sculpture, graphics and mixed media.

Students are able to incorporate their knowledge of art better as a result of this philosophy and program.

Additional Information:
School district: Marple Newtown School District
County: Delaware
Grades: 7-12
Pamphlet available upon request

Contact person: Harvey Roth
Chairman, Art Department
Marple Newtown School District
120 Media Line Road
Newtown Square, Pa. 19073

A BEHAVIORALLY DESCRIBED BIOLOGY COURSE

A set of behavioral objectives is being formulated for the purpose of guiding teachers and defining the behaviors expected of students at the completion of the Marple Newtown Senior High School college preparatory biology course. During the academic year 1967-1968 a first draft of approximately 100 behavioral objectives was prepared; this set has been revised and expanded. Simultaneously, criterion test items for each objective are achievement of each student and to determine the percentage of students who achieve the performance described in each behavioral objective. Since 1968-69 achievement has been evaluated through semester and final examinations.

Enrollment in the college preparatory biology course includes classes of 8th grade academically talented students, 9th grade accelerated students and regular 10th grade students, some of whom are taking the course as independent study students.

The laboratory approach is emphasized. Classes are scheduled for seven periods per week including two double-period sessions. The textbook, Biological Sciences - Molecules to Man (BSCS-Blue) Revised Edition, Houghton Mifflin, 1968, serves as the basic reference for the course.

Additional Information:
School district: Marple Newtown School District
County: Delaware
Grades: 8-10

Contact person: James V. DeRose
Head of Science Department
Marple Newtown School District
120 Media Line Road
Newtown Square, Pa. 19073

A BEHAVIORALLY DESCRIBED CHEMISTRY COURSE

Since the 1967-68 school year, the college preparatory chemistry course at Marple Newtown Senior High School has been described in terms of observable and measurable behaviors students should possess upon completion of the course. Approximately 170 behavioral objectives constitute the content of the course. The objectives have been classified as basic and optional and have been arranged in a hierarchy based on prerequisite behaviors. Data are being collected to validate each step of the hierarchy. Students are given the behavioral objectives and are encouraged to take the initiative in achieving the competencies described by them; provision is made for students who wish to work individually and at their own pace.

The assessment of student achievement is based entirely on the set of objectives. At least six criterion measures each having a one-to-one correspondence with each of the objectives have been written. The students know not only what they are expected to do, but they also know when they will be asked to demonstrate that they have achieved the behavior.

Data are collected on the number of students who achieve each of the behavioral objectives. Analysis of the data has led to questions regarding sequence, omissions, difficulty, validity and significance of specific objectives. As a consequence, a continuing revision of the course is taking place. The aim is to arrive at a basic chemistry course described by a set of behavioral objectives that is reasonable and achievable for 90 per cent of the school's college-bound students.

All periods are scheduled in a laboratory. Arrangements are made for laboratory investigations to be designed by individuals--and whenever this does not occur--through discussion in groups with the teacher.

Several reports and the set of behavioral objectives are available at cost.

Additional Information:
School district: Marple Newtown School District
County: Delaware
Grades: 9-11

Contact person: James V. DeRose
Head of Science Department
Marple Newtown School District
120 Media Line Road
Newtown Square, Pa. 19073

INDEPENDENT STUDY SCIENCE PROGRAM

The independent study science program was initiated in 1966-67. The program is designed to permit students in grades 9-12 to study independently three college preparatory science courses--biology, chemistry and physics--with the advice and direction of a teacher only as needed. The program is based on two premises: (1) learning results only from individual efforts and (2) learning how to learn is the primary, essential and most important ingredient of an education.

ISSP students are required to meet the basic requirements of the course offered to college preparatory students by the science department. Each ISSP student in consultation with the teacher eventually develops a custom-tailored program in which only the basic and minimum essentials are those of the standard college preparatory course.

A set of basic and optional behavioral objectives for each course and its related laboratory investigations has been prepared to guide the students. Assessment of the achievement of each student is made in terms of the behavioral objectives. Criterion test items have a one-to-one correspondence with the objectives.

The results demonstrate without a doubt that ISSP students do learn what other students in conventional classes learn. Furthermore, some of the data indicate that although ISSP students on the short term do not learn details as well as students who are taught in the conventional manner, the ISSP students in the long run demonstrate a more complete and functional understanding of the major ideas, procedures and principles.

Several reports are available at cost.

Additional Information:
School district: Marple Newtown School District
County: Delaware
Grades: 9-12
Pamphlet available upon request

Contact person: James V. DeRose
Head of Science Department
Marple Newtown School District
120 Media Line Road
Newtown Square, Pa. 19073

SEMESTER CURRICULUM

The offerings are divided into English I, II and III and a semester in a literature elective. English I, II and III programs are designed to maximize the utilization of student's potential through team teaching and flexible scheduling. There is a basic concern for the psychological makeup of the individual student--specifically the factors that affect learning. These courses must operate in an atmosphere which is conducive to motivating the student, cultivating the natural desire and curiosity into specific pursuits in the study of English.

English I gives priority to reading--developmental according to needs. Units on writing--sensory impression, short script (duologue) with stress on syntax and usage; the study of etymology--the origin of words with a survey of the history of the English language, are imperatives for all students. As students achieve success in the imperatives the teaching team will initiate an intensified unit on the development of the language from Chaucer to modern times.

Reading--comprehension with advanced reading rate; writing--different types of essays, reportage--journalistic, short script (three-way dialogue); study of semantics--language in thought and action and a unit on speech are the imperatives for students of English II.

Critical reading and writing, units on logic, research and speech are the imperatives for those students of English III capable of handling indepth material.

In the one-semester elective program, the literature courses may focus on genre (short story, poetry, novel) or utilize a thematic approach. Other electives offered are literature of eastern and western religions, Reading Techniques I and II, Theatre Arts I and II, Speech I and II, creative writing and American studies (correlated with social studies).

The outside reading requirements vary according to the elective selected. The writing program continues throughout both semesters. The composition program requires weekly compositions; the teacher corrects one set of papers per week, alternating sections while the theme editor corrects four sets. The physical facilities of the department are conducive to team teaching, programmed learning, research, independent study and seminar activities.

Additional Information:
School district: Marple Newtown School District
County: Delaware
Grades: 7-12
Pamphlet available upon request

Contact person: Frances Nye-Peterson
Chairman, English Department
Marple Newtown School District
120 Media Line Road
Newtown Square, Pa. 19073

ELEMENTARY PHYSICAL EDUCATION

A definite need to improve the physical fitness of elementary level children initiated this program. The local school district had evaluated its own situation after viewing the results of national physical fitness examinations and reviews and found that the need existed. The program provides development in five different areas: (1) psychomotion skills and abilities; (2) coordination, endurance and strength; (3) proper health procedure as related to physical exercise; (4) leadership, sportsmanship and self-control and (5) preparation for wholesome use of leisure time. To achieve these goals, instruction is provided by a physical education specialist who also gives in-service training and guidance to the classroom teachers. Included in the project are a sequential program of varied activities to meet individual child needs and a continuing program of evaluation to determine each child's physical growth. Also, an adapted physical education program has begun in grades 1-6.

Evidence of success is that pupils have increased their participation in community recreational activities and that there is a local-wide awareness for the need of a planned physical fitness program. An unexpected side-effect is that administration, classroom teachers and the community are all providing greater support to this fitness program than before. Officials recommend that sufficient staff specialists be hired, indoor and outdoor facilities for each building be provided and the physical education supervisor be involved in budget planning. The one obstacle to overcome is the traditional reluctance of the classroom teacher to accept the program in the regular elementary school day.

Additional Information:
School district: Mechanicsburg Area School District
County: Cumberland
Grades: 1-6

Contact person: James A. Montgomery
Elementary Physical Education Supervisor
Mechanicsburg Area School District
Mechanicsburg, Pa. 17055

CONTINUOUS PROGRESS PLAN

Continuous progress is a method or organization by which children proceed through the elementary school at their own individual rate. Each child covers as much of an appropriate curriculum as he or she can during the year.

At the beginning of the next term, the children proceed from where they stopped and again work at their own rate of growth. For most students, six years will be sufficient time to cover the required curriculum. However, seventh year pupils will not repeat work as they would if they were retained in a grade level for two years. The academically talented children may proceed at their own rate of speed and will not have to slow down to permit the less able students to keep pace.

This program was initiated in order to meet the needs of the elementary school-aged students who need to feel continuous success instead of constant failure. It was felt that the program would help children progress through reading from the beginning of reading to the junior high school level in 15 steps, the 15th reading level being equivalent to 7th grade.

Parents were introduced to this plan in preliminary meetings early in the program. At the close of school in June, primary children are assigned to the level of reading in which they will begin in September.

A list of skills, appropriate for each level, has been created to enable students to progress from one level to another more smoothly and to insure accomplishment of said skills.

This plan is now being expanded to include the mathematics program through the elementary school. Similar approach is being initiated with similar goals in mind.

Additional Information:
School district: Millcreek Township School District
County: Erie
Grades: 1-6

Contact person: William C. Flick
Principal
Millcreek Township School District
3857 W. 10th St.
Erie, Pa. 16505

COMPUTER ASSISTED INSTRUCTION

Millersville State College and several school districts in Dauphin, Lancaster and York counties are joining in a cooperative effort to bring an innovative educational technique to the area. Computer assisted instruction, more commonly known as CAI, is available to students in Central Dauphin, Conestoga Valley, Manheim Central, Penn Manor, Central York, Eastern York and West York school districts.

Millersville State College is the first college in the county using the RCA system and involving several school districts. Teleterminals in the school districts are connected to a giant computer located on the Millersville campus through the use of telephone lines.

The computer automatically performs all the recordkeeping and scoring of the students' performance and makes such data available to the instructor upon demand. By storing such information within its memory system, the computer represents a timesaving feature to the instructor.

Drill and practice is a valuable facet of the CAI program. Drill and practice is definitely an individualized mode of instruction. Each exercise presented to a particular student is a reflection of that student's competency level and what he has accomplished to date. The material, therefore, is responsive to each student's rate of learning and will vary from student to student accordingly.

It should be noted that the drill and practice mode is inherently reinforcing to the student's behavior. The student receives immediate knowledge of results and knows whether or not the performance is right or wrong. No longer is it necessary for an individual student to wait until the instructor has had an opportunity to grade tests or homework--a wait which can be extended to several days in length. On the contrary, each student knows the results of the performance before he or she leaves the teleterminal, both on an item-by-item basis and on an accumulative or summary basis.

Another mode of instruction which will be available through the CAI program is called "tutorial." In contrast to drill and practice, tutorial mode affords new and novel information to the student based upon the performance at the teleterminal. It can, therefore, supplement the information provided by the instructor in the classroom environment. If, for example, the student is unable to give the correct answer to a particular subject matter, a retest is then given to determine comprehension. Based upon the sophistication of the instructional strategy and the curriculum materials in the data base, a series of such branchings can occur so that the student can receive several different exposures of remedial information if he or she is having continual difficulty with the particular subject.

COMPUTER ASSISTED INSTRUCTION (Cont'd.)

A third mode of instruction--still being experimented with in the Millersville Educational Development Center--is that situation in which the students carry on a dialogue with the computer system. In both the drill and practice and the tutorial modes, the computer system has determined the material which students will receive based upon their performance to date. In the dialogue mode, however, the students can determine what information they want from the computer. The instructional strategy now is determined by the users of the system (the students) and not by the system itself. Students can, therefore, carry on an interactive "conversation" with the computer by which they can seek solutions to various problems and request information.

Finally, CAI can be utilized as a means to stimulate real life situations. For example, the student can be exposed to an analogy of a real world experience by employing the computer as a surrogate for those situations in which time, costs, availability or personnel preclude the actual experience.

Additional Information:
Contact person: Robert J. Labriola
Director
Educational Development Center
Millersville State College
Stayer Research and Learning Center
Millersville, Pa. 17551

INDIVIDUALIZED INSTRUCTION: ELEMENTARY LANGUAGE ARTS--CONTINUOUS PROGRESS

To provide for the greatest probability of individualizing instruction, it is necessary to maintain the most appropriate match between the student and the curriculum. The method by which successful matching is enhanced is to provide for continuous progress. A nongraded program and one which includes the notion of continuous progress share a common principle--to accurately establish each student's potential acquisition ability and most suitable materials. This ideally means that no student shall be forced to progress, lacking necessary operating behaviors. Nor shall any student be held back if he or she is able academically to perform effectively at an advanced point. Milton Area provides continuous progress programs in mathematics, science, social studies and language arts.

Unlike the consensus "nongraded" program, this continuous progress program maintains social-chronological grade levels. That is to say, the entire curricular sequence is available to every student in each classroom. There exists a complete supply of materials for each student. Combined with continuous progress are other techniques which not only give continuous progress greater merit, but allow for a more nearly individualized instructional scheme. Briefly described, they are (1) constant level of mastery (as time varies, mastery does not); (2) equal standards (each child learns the same material) and (3) alternate modes of instruction.

The Milton Project is a joint effort between the Milton Area School District and Bucknell University. In 1964 the Ford Foundation granted the original funds for this effort. As of March 1968, the local board has continued the project unaided by foundation support.

Additional Information:
School district: Milton Area School District
County: Northumberland
Grades: 1-5
Pamphlet available upon request

Contact person: Augusta S. Foose
Elementary Director
Milton Area School District
700 Mahoning St.
Milton, Pa. 17847

INDIVIDUALIZED INSTRUCTION: LANGUAGE ARTS-MIDDLE SCHOOL

The major thesis for the organization of the Milton Middle School language arts program is to accurately diagnose the specific needs of each student involved in the program and to correctly match these needs with appropriate instructional materials. Many of these objectives are a follow-up of elementary work. The following are the basic material components of the program:

1. An intensive readiness program which concentrates on auditory discrimination, basic articulation and visual perception.
2. Intensive phonics work to repair faulty word attack skills.
3. Large amounts of high interest, easy reading material for remedial students.
4. Small remedial reading classes and small groups taken from higher ability classes.
5. Developing increased competency in comprehension by continuous application of the following skills:
   a. Using context clues
   b. Finding facts
   c. Locating answers
   d. Finding main ideas
   e. Grasping sequence of events
   f. Using informational sources
6. A large independent reading program, consisting mainly of paperback books, for children who require a minimum of supervision.
7. Comprehensive units on mythology, poetry and short stories for class use or individual instruction.
8. Special speaking and listening activities including choral reading and oral interpretation.
9. Speed drill and skimming and scanning exercises to increase reading speed and comprehension of higher ability students.

Coordinated with each reading activity are complementary spelling or vocabulary lessons, grammar, paragraph writing and composition and research activities. Special attention is paid to the developmental structure of reading behavior.

Constant evaluation is made of the progress of each child through the use of diagnostic tests, curriculum embedded tests and mastery tests. Students progress in a continuous fashion at differential rates. The teacher's role becomes one of diagnostician and one of providing a prescription for the child's needs. Small and large group instruction play an important role in the development of the child's potential. The language arts program, operational at the beginning of the 1969-70 school term, is included in the Milton Project, a joint effort of the Milton Area School District and Bucknell University. Funded by the Ford Foundation from September 1964 to March 1968, it is presently being continued by the Milton Area School Board.

Additional Information:
School district: Milton Area School District
County: Northumberland
Grades: 6-8

Contact person: Tirzah E. Pesto
Chairman, Language Arts Department
Milton Area Middle School
32 S. Turbot Ave.
Milton, Pa. 17847

INDIVIDUALIZED INSTRUCTION: SOCIAL STUDIES

Individualized instruction provides the most effective and efficient education for each student and requires the use of the following techniques:

1. Continuous progress--This permits each student to progress at a rate most appropriate for his or her best learning. Prelearning acquisition and retention behaviors are most significantly considered.
2. Alternate modes of instruction--By preparing a number of different teaching materials for each behavioral objective to be mastered, it is more probable to provide the most suitable mode of instruction.
3. Constant mastery--As time varies via continuous progress, each student is required to master the same material with equal proficiency--both at the acquisition stage and through time. This further insures that individual attention is focused upon different learning performances where time is the important variable.
4. Grades 6 and 7 are presently involved. Materials are organized conceptually and include the following concepts: Observation, classification, measurement, introduction to culture, customs, art, music, literature, religion, government, conservation, conflict, compromise, power and scarcity. Materials have been developed to include those areas of the world and those periods suggested by the Pennsylvania Department of Education.

Each concept is pretested and posttested and includes a number of acquisition tests. An 85 per cent level of mastery is required on all material. A large array of filmstrips, tape recordings, games, puzzles, transparencies, kits and models are available to provide for alternate modes of instruction. Nine different instructional approaches have been prepared for each objective. All materials are located in a materials center room which feeds all classes simultaneously.

The individualized social studies program, believed to be the only one of its kind, is one of four programs developed jointly by the Milton Area School District and Bucknell University--together called the Milton Project. The project was originally started in 1964 with a grant from the Ford Foundation. It continues to date, supported by the local school board.

Additional Information:
School district: Milton Area School District
County: Northumberland
Grades: 6-7
Pamphlet available upon request

Contact person: Charles J. Fritzges
Chairman, Social Studies Department
Milton Area Middle School
32 S. Turbot Ave.
Milton, Pa. 17847

LARGE GROUP--DRIVER EDUCATION

This school district had a not too uncommon reason for starting this large group program. It simply was unable to enroll all interested students in its driver training program because of limited time and staff. Basic to this program was the desire to make all eligible students aware of their social responsibility as drivers and pedestrians, to instill and promote a favorable attitude toward highway safety and to reduce traffic accidents and emergency situations.

The use of visuals has enabled the district to put many students behind the wheel in simulated driving situations who would not normally have been able to enroll in the program. The visuals have increased efficiency and time of the teachers and made more effective use of human resources. It is felt here that driver education is an integral part of the community, that the development of proper driving attitudes are part of good citizenship training. Knowledge of the rules of the road are important to maintaining a good safety record in the community. The large group instructional program offers students an experience in utilization of multimedia experiences in practical application of the theory involved in driver education. The method of presentation has had carryover value in participation in civic activities after graduation from high school.

As a result of large group driver education, an additional 35 to 40 students are involved each year.

Additional Information:
School district: Milton Area School District
County: Northumberland
Grade: 10

Contact person: Larry R. Barlett
Milton Area School District
700 Mahoning St.
Milton, Pa. 17847

MATHEMATICS--MILTON AREA MIDDLE SCHOOL

The Milton Area middle school mathematics program is an individualized program. This type of instruction provides the most effective and efficient education for each child.

The following techniques are used in the program:

1. Continuous progress--This permits each child to progress at a rate most appropriate for his best learning.
2. Alternate modes of instruction (various filmstrips, tape recordings, games, movies, models, charts, textbook references, small group instruction on selected concepts) are used as the pupils' needs dictate.
3. Constant mastery--As time varies via continuous progress, each child is required to master the concepts with equal proficiency.
4. Constant standards--Rather than permit different curricular tracts, there exists one continuum of behavioral objectives.

Approximately 1,500 lessons have been prepared with various methods and approaches to meet the 600 objectives in the nine levels. This includes no advanced mathematics courses. The program is operating in grades 5-10 with the materials being written to satisfy pupils' ability for grade equivalent 3-12. All units are pretested and posttested with varying numbers of acquisition tests between the diagnostic and posttests, with alternate tests for those who fail the first test.

The materials which have been prepared by the staff of the Milton middle school, assisted by some elementary and high school teachers, contain the language and approach of "modern mathematics" and are kept in a materials center room which feed all classrooms simultaneously. They are constantly being revised, based on pupil error rate.

The program is staffed by professionals and paraprofessionals who work together as a team. The pupils correct their own work sheets which gives immediate reinforcement. A spiral curriculum gives repetition of material to also reinforce learning. The entire program is geared to encourage independent thinking and pupil responsibility.

The mathematics program is an outgrowth of the Milton Project which originally began with a grant from the Ford Foundation in 1964 and was developed jointly by Milton Area School District and Bucknell University. It continues to date with its major support from the local board of education.

Additional Information:
School district: Milton Area School District
County: Northumberland
Grades: 5-10
Packet available upon request

MATHEMATICS--MILTON AREA MIDDLE SCHOOL (Cont'd.)

Contact person: Elizabeth H. Dobb
Chairman, Mathematics Department
Milton Area Middle School
32 S. Turbot Ave.
Milton, Pa. 17847

READING PROGRAM IN THE SENIOR HIGH SCHOOL

The reading program was developed to meet some important needs of 9th and 10th grade reluctant and low ability readers. This year it is being expanded to include needs of similar 11th grade students. For each grade two classes of approximately 25 students were opened. Materials chosen for the program should appeal to the students, help them overcome their reading reluctancy and guide them into the practical benefits of reading.

In order to implement these objectives, a course of study has been set up which includes diagnostic testing, personal interviews and various activities which will fit the needs of the students. No particular order is required. It has been determined, however, that students usually benefit most by starting with the smaller unit (the article, the short story) and by eventually reading the longer work (we have several hundred paperback titles available). Thematic units based on values, success, humor, courage and similar themes are used. Also included is work in photography (telling stories in pictures), newspapers (You and Your World encourages the practical side of reading), in composition (writing friendly letters and letters of request), in the use of the library (with emphasis on its use for pleasure) and on grammar and vocabulary (basic sentence patterns, frequently confused words, etc.).

While evaluation of the success of this program is difficult, those working with the program feel that students are reading much more than formerly and appear to be attracted to the element of choice. The material is of high interest but of low level reading ability. The amount to be covered does not receive an overemphasis, but rather every attempt is made to cover areas of individual interest.

Additional Information:
School district: Milton Area School District
County: Northumberland
Grades: 9-12

Contact person: Lorena M. Kyle
Chairman, Language Arts Department
Milton Area School District
700 Mahoning St.
Milton, Pa. 17847

SUMMER ORIENTATION

The Moniteau School District is composed primarily of four elementary schools and one junior-senior high school. The district covers an approximate area of 225 square miles. Within this area there are four distinct communities, somewhat isolated from each other.

The program was initiated as an ESEA Title I project to help those 7th grade students who were identified as culturally and educationally deprived.

The primary objectives of the program for students are:

1. To orient the incoming 7th grader to the physical surroundings of the school.
2. To have the students become acquainted with one another.
3. To have students become acquainted with some of their 7th grade teachers.
4. To familiarize students with prospective 7th grade class schedule.

Primary objectives for teachers are:

1. Evaluation of students' academic needs.
2. Evaluation of student records.
3. Preparation for the regular school term.
4. Establish student-teacher rapport.

Additional Information:
School district: Moniteau School District
County: Butler
Grades: K-12

Contact person: H. Ray Hepner
Director, ESEA Title I Program
Moniteau School District
R. D. #2
West Sunbury, Pa. 16061

RESEARCH AND INFORMATION SERVICES FOR EDUCATION

Research and Information Services for Education, an ESEA Title III project funded by the U. S. Office of Education through the Pennsylvania Department of Education and sponsored by the Montgomery County Intermediate Unit, provides a variety of services to bring the rapidly expanding knowledge resulting from educational research into use by practitioners in the field. These practitioners include school administrators, supervisory staff, teachers and others charged with educational decision-making in the schools. The service elements of the project include a specialized library collection of research information and related indexes and other retrieval tools; major literature searches for school districts are carried out by both manual and computerized retrieval processes, a dissemination service which provides specific research information to specified target groups using the media most appropriate for creating high impact; in-service training and consultation services to aid educators in the use of research information and analytical services to assist educators in devising and conducting evaluative efforts and interpreting research results.

In addition to providing these services to the educational community of Montgomery County and adjacent counties, the project will also develop strategies for the development of a statewide dissemination network in connection with the Pennsylvania Department of Education. Drawing on its own experience as a prototype educational information center, the project will work closely with both state and national agencies in making the burgeoning mass of educational research available to the educational practitioner. The Commonwealth's emerging intermediate unit system will provide a base for the establishment of the RISE model in other regions of the state.

Additional Information:
School district: Montgomery County Intermediate Unit
County: Montgomery
Grades: Not applicable

Contact person: Richard R. Brickley
Project Director
Research and Information Services for Education
117 W. Ridge Pike
Conshohocken, Pa. 19428

COMPUTER PROGRAMMING

Computer programming at Mt. Lebanon is a very important part of our curriculum. About 100 students are actively programming in Fortran IV and another 100 students are introduced to the basic programming language through their mathematics and science courses. We offer Fortran IV as a separate one-semester course and basic as a nine-week course. A continuous program of in-service training for teachers in basic has been developed and is being continued. The computer programming concept has been applied to courses in mathematics, science, English and the languages. The students are very interested and many of them have spent hours developing ingenious programs. The students are particularly interested in graphing programs and some of them have done outstanding work with polar coordinates.

Additional Information:
School district: Mt. Lebanon School District
County: Allegheny
Grades: 10-12

Contact person: Elizabeth A. Evans
Assistant Principal
Mt. Lebanon School District
Pittsburgh, Pa. 15228

CONSUMER ECONOMICS

"Consumer exploitation has replaced labor exploitation as the real problem of our times"--so says Herbert M. Jelley in the January issue of Business Education World. Business practices are being criticized severely and the need for consumer protection is evident. Until quite recently, people seemed willing to put up with the "minor" evil of consumer deception. Caveta emptor--"let the buyer beware"--was an accepted business motto. But with the appearance of such vocal consumer champions as Ralph Nader and Betty Furness, citizens of all ages are becoming progressively more concerned with the misdeeds and seeming lack of empathy on the part of entrepreneurs. Now the motto is changing from "let the buyer beware" to "let the seller take care."

Mount Lebanon High School recognizes the urgent need for consumer education and the pivotal part a school can play in this education. In accordance with this recognition, we are initiating a "team-planned and turn-taught" consumer education course in September of this year. This pilot course will be one semester in length and open to seniors only, with a maximum student count of 25. It will be planned by the combined business education, home economics and industrial arts departments. It will be taught in six-week, coordinated segments by one teacher from each participating department, in turn.

The purpose of the course is to "help each student evolve his own value system, develop a sound decision-making procedure based upon his own values, evaluate alternatives in the marketplace and get the best buys for his money, understand his rights and responsibilities as a consumer in our society and fulfill his role in directing a free enterprise system."[1]

In conclusion, consumer education is of major importance for all people, both young and old, for the reasons stated in the preceding paragraph--it will aid them in becoming competent and efficient dealers in the modern-day marketplace.

Additional Information:
School district: Mt. Lebunon School District
County: Allegheny
Grades: 10-12

Contact person: Elizabeth A. Evans
Assistant Principal
Mt. Lebanon School District
Pittsburgh, Pa. 15228

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[1] Taken from a statement in the December 1970 issue of Hot Line, published by the American Association of School Administrators.

ENGLISH

The English department of Mount Lebanon High School is making a major curriculum change in the fall of 1971 from a traditional three level one to the nongraded phase elective program.

Nongradedness is a philosophy of education enabling a school to meet the differing social, mental and physical capacities of young people, using a structure that eliminates grade levels, promotes continuous progress and permits meaningful individual instruction. The new plan recognizes individual differences in motivation, pace and learning and attempts to find ways to relieve student frustration and boredom.

For 1971 the English department offers four communication courses, four writing courses, two skills courses and 28 literature courses, some thematic, such as the tragedy of man, youth in literature, literature of the oppressed. Others include courses in Shakespeare, biography, religious literature of the west, British and American novelists, films and the like. To satisfy parents and young people who prefer a more traditional approach, four electives are offered including two in English literature and two in American literature with a chronological approach.

The students place themselves according to interests, abilities and motivation. Some courses such as independent study are multi-phased. Some, like the lighter side, are phased 1-2-3. Others such as satire are phased 4-5. Students must fulfill the Pennsylvania requirements for six semester hours of English but may take as many English courses as their schedules permit. Each course includes reading, writing, speaking, listening, viewing.

Student enthusiasm for the freedom of choice is high. English teachers, too, are stimulated by courses they want to teach and have planned bringing to the new curriculum an increased awareness of the changing times and the need for greater experimentation and innovation in teaching techniques.

All courses are one semester in length. There are no prerequisites. Students for Communication I are selected by a faculty committee of counselors and English teachers. At the moment, the school will continue the advanced placement program.

Additional Information:
School district: Mt. Lebanon School District
County: Allegheny
Grade: Nongraded

Contact person: Elizabeth A. Evans
Assistant Principal
Mt. Lebanon School District
Pittsburgh, Pa. 15228

HUMANITIES

This is an elective course open to 11th and 12th grade students as a semester or a year program. It has been developed to meet the needs of students to acquire a sense of values in their changing world. Through a study of the cultural epochs, the students investigate the social forces of various ages and their influence on the arts to determine what values man placed upon himself and his world. As the year progresses, students gain an understanding of Greece, the middle ages, the Renaissance, the enlightenment, the romantic age and their contemporary world. In each era the students identify apparent universal values and changing values as expressed in philosophy, drama, painting, sculpture, architecture, music and dance.

The fundamental approach in the course is independent study, audio-visual presentations and class discussion. Guest lecturers from the resource faculty and the community supplement student preparation.

Students reinforce their exploration of the arts by visiting buildings of architectural value and art galleries. In addition, they attend the theater, the opera, the ballet and the symphony.

As an outgrowth of their study, students develop creative projects, discover their own creativity and gain respect for the creativity evident in mankind as expressed in the humanities.

Additional Information:
School district: Mt. Lebanon School District
County: Allegheny
Grades: 11-12

Contact person: Elizabeth A. Evans
Assistant Principal
Mt. Lebanon School District
Pittsburgh, Pa. 15228

INDEPENDENT STUDY

The program of independent study realizes the need of certain students to receive the opportunity to work independently in one or more areas of learning in which they can explore an interest that cannot be fully pursued in formal classroom situations. To achieve this end, students are released from certain normally assigned time to conduct their study. The students define their chosen problem, outline their procedures and are given the opportunity to meet in individual conferences with advisors to probe problems of the moment. Opportunities are provided for the students to go into the community to use available resources related to their area of interest. Since the initiation of the program, local businesses and institutions of higher learning have shown extreme interest in offering their services wherever needed.

The students participating in the program are encouraged to take only four major subjects, thereby insuring themselves of ample free time for their projects. The students receive full credit for their work in independent study but no grade. Along with their transcripts is an explanation of the program and an evaluation of their achievement in it.

An original intradistrict committee has conducted an evaluation of the program by interviewing students and faculty advisors involved in the program and by talking informally with college admissions personnel about the value of this type of project. The evaluation has stimulated a wish to open the program to more students.

Additional Information:
School district: Mt. Lebanon School District
County: Allegheny
Grades: 12

Contact person: Elizabeth A. Evans
Assistant Principal
Mt. Lebanon School District
Pittsburgh, Pa. 15228

NONGRADED PRIMARY PROGRAM

The nongraded primary program was initiated to implement change on a controlled basis to permit the identification and utilization of instructional practices consistent with changing purposes and expectations of elementary education. Administrators began a study to establish the program and selected a staff which trained in summer workshops. The summer workshop has continued for the staff to make decisions, develop levels and organize materials.

Each pupil's progress is evaluated with respect to his individual ability, past performance, rate of development and long range expectation. Other objectives include the placement of each pupil within the curriculum on the basis of his own development, to aid his continuing progress and to permit each pupil to experience frequent success and satisfaction in his learning. The program attempts to develop interest centers as local points for instruction in social living. Classroom grouping is flexible with progress achieved through levels of skills in language arts and arithmetic. Pupil gains are measured on the basis of mastery for ability and progress reports are given on an individual basis. The librarian is utilized as a central agent in the program.

Additional Information:
School district: Mt. Lebanon School District
County: Allegheny
Grades: Primary and Intermediate Classes

Contact person: Enid McGinnis
Curriculum Coordinator
Washington Elementary School
Mt. Lebanon School District
735 Washington Road
Pittsburgh, Pa. 15228

PASS--FAIL COURSES

The adoption of a new schedule has allowed for the addition of a number of electives. A few of these are full credit electives.

We have, however, introduced a series of electives known as pass-fail courses. These are semester electives, carrying one-half credit, a grade of pass or fail and they require no preparation outside of class. The faculty was asked to submit suggestions for these courses, to propose some basic objectives for any course suggested and to indicate whether or not they would be willing to teach one or more of these courses.

From the 60 suggestions received, 15 courses were selected on an experimental basis. These courses include the following: basic acting, basic oral interpretation, classical mythology, sculpture, recreational mathematics and appreciation of French music.

In addition five courses are offered in communication skills which offer one-fourth credit per semester and meet just twice a week. They include reading, study skills and vocabulary enrichment.

All vocal and instrumental music courses and physical education were changed to pass-fail courses.

Twelve teachers are involved in teaching these courses, and in the first year that the courses were offered approximately 1,600 students were enrolled in one or more courses. All classes except those in communication skills meet 220 minutes a week. A student-faculty evaluation was conducted at the conclusion of the first semester and recommended that the program be continued.

Additional Information:
School district: Mt. Lebanon School District
County: Allegheny
Grades: 10-12

Contact person: Elizabeth A. Evans
Assistant Principal
Mt. Lebanon School District
Pittsburgh, Pa. 15228

TEAM TEACHING

The team teaching program evolved from the concern of teachers for pupils grouping in reading. The program began with exploration into three areas: (1) utilization of cooperation in instructional planning and preparation, (2) instructional advantages in the use of different sizes and types of pupil groups and (3) reactions of parents and pupils to a changing organization.

The primary goal of the program has been to improve the quality of instruction by helping students in all phases of education. The teachers of each team conduct cooperative planning sessions. The students are grouped in types of homogeneous classes, according to interest, ability and need, and are deployed from room to room to form their groups. The academic and social behavior of the pupils is evaluated by team members who analyze their progress and recommend means of improvement.

The program has been evaluated by means of standardized tests given periodically, in addition to a comparison of an experimental group involved in the team teaching project with a self-contained classroom control group. The evaluation has shown that the team pupils perform as well as self-contained pupil groups in the regular and standardized testing programs. In some areas the team pupils have been shown to be superior to self-contained pupils and are less dependent on teachers.

Additional Information:
School district: Mt. Lebanon School District
County: Allegheny
Grades: 4-6

Contact person: Francis Lyman
Principal, Washington School
Mt. Lebanon School District
735 Washington Road
Pittsburgh, Pa. 15228

WORLD CULTURES

The main objective of the course is a thoughtful understanding of the ways in which other people live. It may mean a change in attitude on our part but we must accept others as they are and not try to change everyone into our own image. By looking into the past, by appraising the present and taking an optimistic view of the future, perhaps it is within our realm to grasp what it is that makes these people what they are. We are too quick to think that we are the center of the universe; that everybody looks to us for support and advice. True, we have a highly developed civilization. We are the most advanced technologically, scientifically, industrially. Financially, no one can compete with us. Believe it or not, this does not impress every nation in the world.

The course is not to be a travelogue of exotic countries. World cultures focuses on contemporary affairs. It is an effort to portray people as they are now and to provide insights into how their cultures function. The past and the traditional must be examined when necessary to understand the dynamics of the present. This does not make it an extended current events class. All phases of the culture must be explored in order to get the full picture, not of the country, but of the people.

The world cultures course has been revised for the fall of 1971 school year. Although world cultures is primarily, but not necessarily, a 10th grade subject, juniors and seniors who did not take it in their sophomore year may elect it.

During the first semester, the student will have a nine-week course in cultural orientation and analytical techniques. The second nine weeks will be taken up with the study of Western Europe. For the second semester, students will elect two area studies, and each area will entail nine weeks of work. The areas which the students may elect are in the following combinations: Africa-India, Latin America-Middle East, China-Middle East, Japan-South East Asia, China-Africa, Soviet Union-South East Asia and India-Latin America.

In summary, the first semester's course will consist of two nine-week periods. In the first nine weeks, culture and inquiry techniques will be introduced. In the second nine-week period, we will create social, political, economic and belief system concepts and models in the context of Western Europe. During the second semester, the concepts of imperialism, colonization and revolution will be developed in the context of the specialized geographic regions selected by the students in the first nine weeks. In the second nine weeks, the concepts of nationalism and industrialization-urbanization will be developed. Time during the nine-week periods not devoted to the concept-model process will be utilized to expose the students to various teaching techniques (inquiry, etc.) and to other facets of the region of study.

Additional Information:
School district: Mt. Lebanon School District
County: Allegheny
Grade: 10

WORLD CULTURES (Cont'd.)

Contact Person: Elizabeth A. Evans
Assistant Principal
Mt. Lebanon School District
Pittsburgh, Pa. 15228

EXPANSION OF THE NESHAMINY READING TEAM PROGRAM

The former partially federally subsidized reading team project was terminated on August 31, 1970. Many of its strengths and successes are being continued and expanded at district cost in the Neshaminy School District.

The three junior high schools: Carl Sandburg Junior High School--1,110 students; Neshaminy Junior High School--1,367 students and Poquessing Junior High School--1,057 students, have been organized into student-oriented learning teams in grades 7 and 8.

The dual purpose of meeting the needs of all students in grades 7, 8 and 9 for developmental reading instruction in the classrooms of the separate disciplines (English, social studies, mathematics, science) while offering continuous in-service for teachers to acquire greater expertise in providing classroom reading instruction in the content areas is being perpetuated.

Additional Information:
School district: Neshaminy School District
County: Bucks
Grades: 7-9

Contact persons: J. E. Ferderbar, Assistant Superintendent
Ruch Flamand, District Reading Consultant
Richard Howard, Principal, Carl Sandburg Junior High School
Richard Evans, Principal, Neshaminy Junior High School
Gerald Bloom, Principal, Poquessing Junior High School
Neshaminy School District
2001 Old Lincoln Highway
Langhorne, Pa. 19047

THE NESHAMINY HUMANITIES PROGRAM

The Neshaminy humanities program was instituted in 1960. Beginning in 1966 a three-year project was supported by an ESEA Title I grant. The K-12 program is currently supported by the school district with students in all 14 schools participating.

Neshaminy Senior High School presently has enrolled 200 sophomore students in a one-period per week elective program, 600 junior and senior high school students jointly enrolled in a two-period per week elective program. In the district's three junior high schools, 846 seventh grade students and 870 eighth grade students are involved in a humanities based interdisciplinary team teaching program. In the 10 elementary schools of the district, humanities is an integral part of the curriculum. A portion of the high school program is interrelated to the elementary program through an organized group of high school students who serve elementary teachers and students.

Of particular significance in the structure of the program is the degree of student planning and the maximum of student participation. The flexibility of group size is a unique factor in the implementation of the program. The groups vary in size from programs presented in single classrooms to groups of 500 or more. Groups consist of mixed grade levels and mixed school combinations. Time periods assigned to programs vary with the presentations. Preparation and follow-up considerations for trips and presentations take place in any classroom and in any discipline where correlation is pertinent and desirable.

The program is totally interdisciplinary in concept and structure. Subject matter barriers are removed and all areas that can contribute to a specific issue of concern are involved.

The program is based on a variety of activities such as lectures, trips, demonstrations, student panel discussions, forums, student dramatic and musical presentations and motion pictures. Neshaminy teachers present programs in any number of schools. Guest speakers from outside the school district--from other districts, colleges, local professional people, speakers from local industry and local clergy--provide a great share of programs. Frequently, 20 or more humanities programs will be presented in the district during a given school day.

The program is based upon universal issues (values) in human living as advocated by the Pennsylvania Commission on the Humanities. The undergirding objectives are to assist the student to establish commendable value judgments, to develop a degree of aesthetic sensitivity and to solve some of the student's own problems in his or her own way.

Additional Information:
School district: Neshaminy School District
County: Bucks
Grades: K-12

Contact person: Barbara E. Williams
Acting Director of Humanities
Neshaminy School District
2001 Old Lincoln Highway
Langhorne, Pa. 19047

INDIVIDUALIZED DRAFTING PROGRAM

A change in philosophy in the drawing-drafting department enabled a change in program. Established philosophy stated that all skills are not necessarily learned in the same sequence by all students and that concentrated work upon a project of importance to the student would help develop skills for each individual, although not at the same time for all.

In keeping with that philosophy, the program is centered around research projects. Students are grouped into units of four depending upon interest. Students having an interest in architectural drafting, for example, are taught the rough construction of a home through field trips, visual aids, lectures, models, etc.

Each group constructs a model with a group leader designated to help keep a record of materials, time, etc. Instruction is given by the teacher in related items such as surveying instruments.

This same basic approach is followed in other research problems such as surface development, heating or air conditioning. The primary intent is to create a high degree of motivation, to allow the student to discover the need for depth of detail and to help influence the student, either positively or negatively, toward that aspect of drafting as a future career.

The student experiences the behavioral pattern of that trade both with other similarly interested students and in individual research. He culminates those experiences with the creation of a design within his area of interest and pursues it from the idea stage to the finished model and working drawings.

Additional Information:
School district: North Allegheny School District
County: Allegheny
Grades: 11-12

Contact person: Albert A. Gaisbauer
Teacher
North Allegheny School District
350 Cumberland Road
Pittsburgh, Pa. 15237

A STUDENT-SELECTED, SEMESTER BASED ENGLISH PROGRAM

High school English programs usually are comprehensive in that they contain both literature and writing. In reality, literature usually is the major part of the program as teachers have had much more background in that than in writing.

The need for more experience in writing and exposure to systematic activities in writing was one major reason for attempting a new program. The other major reason was to allow more selection by students as to what aspects of literature to study and to study that selected in depth.

For those reasons English courses were designed on a semester basis and designated as either writing or literature. Several exceptions to this were journalism, which is a full-year course of both literature and writing, as well as other forms of expression.

Courses in American literature, English literature, general literature, the novel and drama are open to any 11th or 12th grade students in any semester. The student is apprised of the course content and course requirements before selection is made.

Writing courses in general writing, composition, advanced composition, research writing and creative writing are presently available. Each student must take one writing course and one literature course per year. Class sizes in writing classes are smaller than those in literature to permit more opportunity for student writing. Some students take more courses on this semester basis.

Teachers and students are pleased with the approach and further courses are projected, especially in literature.

Additional Information:
School district: North Allegheny School District
County: Allegheny
Grades: 11-12

Contact person: Joseph F. Lagana
Director of Secondary Education
North Allegheny School District
200 Hillvue Lane
Pittsburgh, Pa. 15237

CHILD SERVICE CENTER

This program attempts to promote the mental, emotional, physical and social growth of children from low-income families and/or educationally deprived children whose home experiences, motivation and preschool training have handicapped them to such an extent as to prevent their profiting fully from a school experience.

Preschool Classes--students are selected through a screening test they are given at kindergarten registration. Through the elementary guidance department, decisions are made as to who is in need of this six-week summer program.

When possible, parents are employed as teacher aides in the preschool program. Additional parent participation occurs as chaperones on trips and parent-conferences.

Cultural Enrichment--to provide children with an opportunity to visit cultural sites so that they will be in a better position to take a more active part in classroom discussions. The trips are taken on Saturdays to local places of interest. Parents are encouraged to accompany the students as chaperones.

Corrective Reading--to use specialized materials and techniques while working in small groups and individually with children identified as in need of corrective reading.

During the regular school year, two reading teachers are employed and each one has an aide. A reading teacher will work in one school for a nine-week period.

Teacher Aides--aides will be used as part of our corrective reading and preschool program.

Aides work in the areas where there is a high incidence of poverty and subsequent lack of achievement.

Additional Information:
School district: Northampton Area School District
County: Northampton
Grades: K-8
Pamphlet available upon request

Contact person: Thomas A. Ortwein
Administrative Assistant
in charge of Federal Programs
Northampton Area School District
Seventeenth and Lincoln avenue
Northampton, Pa. 18067

MOTIVATIVE EXPERIENCES

The primary focus of this program is to provide background experiences in social studies for children from economically and/or culturally deprived families. In addition, supportive and complementary experiences are provided in art and reading.

Through a loosely structured informal team teaching arrangement, students are made aware of their local and expanding environments. Special emphasis is placed on the development of positive self concepts, visual understanding, communicative skills and the opportunity to convert abstract ideas into graphic form.

Daily evaluation is provided by an especially designed anecdotal record system which is included as part of the student's permanent record folder. Students are recommended by the professional staff for the five-week summer program. Final selection is made by the project's coordinator and staff members, based on the evaluation of the results of home visits, tests designed for the program by the local educational agency, standardized tests and need priorities established from staff recommendations.

Additional Information:
School district: Northeastern School District
County: York
Grades: 1-6

Contact person: Arthur T. Hendrix
Superintendent
Northeastern School District
Third and Maple streets
Mt. Wolfe, Pa. 17345

ENGLISH

Aware of deficiencies in the basically traditional English program offered at Northern Bedford High School, the department personnel restructured the curriculum to permit a comprehensive program of nongraded electives.

The program, as currently structured, applies exclusively to grades 10 through 12 and combines a number of unique characteristics. Some 35 elective units in language arts are offered to the students on a nine-week basis. Because the units are nongraded, any student in grades 10 through 12 may take any of the courses offered in any combination he chooses. Course content is determined mainly by student interests, abilities and needs rather than by anthologies and tradition. Prior to inauguration of the new program, students were polled for indications of the types of units they wished included in the curriculum.

A minimum of 12 units is required for graduation. Although the units are elective, each student to qualify for a diploma must successfully complete two units in writing, one unit in speech and two units in literature.

Entrance into the program is prefaced by student completion of a standardized test in the 9th grade. Basically the test's purpose is to guide the students in the direction of their interests and needs as they pertain to the curriculum. In addition, before selecting their preferences, the students are counseled by the English teachers for better understanding of the unit contents and aims.

The new program, besides increasing student interest in English, has rejuvenated teacher attitude to some degree. This "reawakening" stems partly from the fact that teachers may select their own teaching assignments--assignments which, as an end result, benefit both student and teacher because of the freedom of choice.

Additional Information:
School district: Northern Bedford County School District
County: Bedford
Grades: 7-12

Contact person: William R. Drobnich
Chairman of English
Northern Bedford County School District
Loysburg, Pa. 16659

INDUSTRIAL ARTS

Moving into a new school with only a woodworking and a metalworking laboratory, it was felt that the industrial arts program was too limited in its content. The job of modernizing was begun to enable course offerings in basic areas of contemporary industry including electricity, mechanical drawing, power mechanics and also a class of engineering drawing for college-bound juniors and seniors.

With some modification, the planning room was converted into a small classroom for lecture and mechanical drawing. To the woodworking laboratory, facilities for electrical experimentation and additional hand tools were added for use on small engines in the junior high school power mechanics class. In the off-season on the senior high school level, the agriculture laboratory is used for power mechanics.

The junior high school, operating on the block schedule, gives the boys one 45-minute period a day for one-half of a year. At the end of this time, they rotate out of industrial arts and a new group comes in.

The total program, grades 7 through 12, consists of two nine-week courses per year in junior high school. Grade 7 receives metalworking and woodworking; grade 8--mechanical drawing and electricity; grade 9--metalworking and power mechanics. Senior high school classes are all double periods. Grade 10 is divided into three 12-week courses of woodworking, metalworking and mechanical drawing. Grades 11 and 12 operate on two 18-week courses per year, with grade 11 receiving woodworking and power mechanics and grade 12 metalworking and power mechanics. In addition to these five basic areas, other areas are taught on a minor scale through the use of industry sponsored films.

Additional Information:
School district: Northern Bedford County School District
County: Bedford
Grades: 7-12

Contact person: James H. Elder or Ron Reid
Teachers
Northern Bedford County School District
Loysburg, Pa. 16659

DISTRIBUTIVE EDUCATION FOR A SMALL RURAL HIGH SCHOOL

The Northern York County School District has had particular success in the establishment of a distributive education program/work experience program in a rural area. Distributive education is normally too narrowly defined. (It is assumed that all students will sell in a department store.) We have taken an expanded definition of distributive education and in doing so have provided opportunity for students to select and prepare for a variety of distributive occupations.

The program requires a close relationship between the school and the employer. It enables employers to train young workers as they want them trained; and they receive as a fringe benefit the supervision provided by the school district. Twelfth grade students are given on-the-job training assignments. The program stresses distributive education and business techniques and a great deal of time is given to human relations skills. Good work habits and attitudes are established. Self-confidence is developed through course work in personality development.

We have found over the past few years that employers have eagerly awaited the assignment of these students; and the community has been provided with a backlog of trained workers in this field of interest.

Additional Information:
School district: Northern York County School District
County: York
Grades: 11-12

Contact person: Ellerslie Blyler
Northern York County School District
Dillsburg, Pa. 17019

CAREER RESOURCE CENTER

It was recognized by the Bureau of Pupil Personnel Services of the State of Pennsylvania and the administration of the North Hills School District that vocational counseling was being handicapped by the lack of an effective means of distributing up-to-date career information to students. In order to fill this void, a career resource center was established in the North Hills School District.

The objectives of the career resource center are: (1) to collect, evaluate and disseminate accurate and relevant career information resources on general and specific careers, (2) to provide experiences to stimulate self-exploration that is necessary for career development, (3) to assist students in planning their educational program with long-range career goals in mind, (4) to provide experiences to assist students in developing competencies in decision-making, (5) to assist professional staff in integrating career development into their classroom activities resulting in the understanding of the relationship of education to occupation, (6) to assist the parent in being an active, concerned and understanding participant in the career development of his children and (7) to utilize community resources in closing the gap between career and educational theory and "the real world."

To accomplish the above objectives, a counselor and a secretary were employed to staff a room of classroom size. This area was filled with the most up-to-date and accurate occupational materials and audio-visual equipment. The secretary performed the mechanical operations, i.e., helping students to find the proper information, showing them how to use the equipment, checking in and out materials and keeping things in good order. This freed the counselor to work directly with students, teachers and people in the community.

The counselor was able to help students relate this information to their own values, abilities and desires. Teachers were involved by the counselor helping them to show students the relevance of their subject to possible student career plans. Citizens in the community volunteered to meet with students as "career consultants" and share their knowledge and experiences about their own careers.

As can be seen, this program has combined an efficient materials distribution center with human resources, i.e., a counselor, teachers and community to help young people in the career development process.

Additional Information:
School district: North Hills School District
County: Allegheny
Grades: 7-12

Contact person: James C. Higgins
Director, Pupil Personnel Services
North Hills School District
4900 Perry Highway
Pittsburgh, Pa. 15229

TEACHER IN-SERVICE WORKSHOPS

Teacher in-service experiences are an important segment of educational excellence. Therefore, programs are developed to give teachers more opportunities to suggest curriculum innovations, to evaluate materials and to suggest topics for group study. During the first days of school, the program is designed to motivate and sustain interest in innovative teaching. Workshops are planned throughout the year to evaluate and revise curriculum in light of the contemporary educational thinking.

The programs are designed to encourage teacher participation in curriculum interest and to participate in a variety of curricular interests. Team spirit is developed through a unified approach of putting district philosophy into practice. The faculty identifies areas of strength and weakness in the existing program. Subsequent in-service programs are patterned according to the needs and interests of the teachers who assign priorities to areas to be explored.

Evaluation of the effectiveness and value of the in-service programs must be conducted by the faculty. Some results of the programs are (1) development of a study skills program, K-12; (2) revision of a language arts and social studies curriculum; (3) local production of instructional media to meet unique needs not met by commercially available sources; (4) testing in pilot studies of instructional material to determine their educational effectiveness; (5) revision of the science and health curricula to include units on drugs and environmental studies and (6) initiation of individualized programs in mathematics. These concrete results of the in-service programs clearly indicate their value to quality education.

Additional Information:
School district: North Hills School District
County: Allegheny

Contact person: Edward D. Kruse
Superintendent
North Hills School District
4900 Perry Highway
Pittsburgh, Pa. 15229

INDUSTRIAL ARTS--GRADE 9

The program in industrial arts for 9th grade is possible as a result of the school's policy of homogeneously grouping these students. Two levels of instruction are available in order to capitalize on the abilities, interests and needs of the students. This concentrated program consists of drawing and related shop activities.

Level I students participate in a unit studies program or a research and experimentation project. The unit studies approach is divided into two areas. The anthropological approach is a study of the history of man's technological achievements. The other is the contemporary approach where a student or group of students choose a present day problem and attempt to solve it. An example of this might be a design for an orbiting space laboratory.

Level II students participate in a program of mass production, small group projects or individual projects. The type of experience will vary with each group according to its abilities, needs and desires. It is the responsibility of the teacher to assess this need quickly and accurately.

INDUSTRIAL ARTS--GRADES 10-12

Major program: Each student must experience a fundamental course, one semester in length, in each of the shops. This program consists of a concentrated emphasis on fundamental experience in that particular shop. Outside assignments consist of vocational job survey reports or industrial visitations.

After a student's fundamental requirements are finished, the advanced work may be done in one shop or more. The duration of time spent is determined by the student's interest and abilities in that particular shop.

Elective program: Students may elect industrial arts out of personal interest in material areas to fulfill certain educational goals or to help develop avocational interests. The program is geared to the individual and to the group. Individual projects might involve design, experimentation, construction and practical application of fundamental course content. Projects can be pursued on a small group basis or a large group basis. Students may become involved with projects in other areas of study; and industrial arts can be used to supplement other classroom theory and work. Community service projects enable students to produce projects which will be of value to others and, at the same time, be of benefit to them as they experience the educational processes involved.

Drawing is offered to all 9th grade students and is elective in grades 10, 11 and 12. The drawing teacher works closely with the rest of the department to coordinate the part of the teacher in the industrial arts program. All shop students have freedom to use the drawing room and drawing students have use of shop facilities if needed.

Additional Information:
School district: Octorara Area School District
County: Chester
Grades: 9-12

Contact person: R. I. Rentz
Principal
Octorara Area School District
R. D. 1
Atglen, Pa. 19310

NONGRADED ELEMENTARY PROGRAM

Graded schools are alike in that they determine basic groupings of pupils upon the criterion of age. Different organizational refinements beyond this primary criterion determine the extensive number of variations that exist among graded schools. Nongraded schools also differ extensively except that groupings of pupils are based upon a primary criterion other than age and, consequently, groupings are multi-aged.

The common element among nongraded schools is a philosophy that the school's program must give every pupil feelings of challenge, achievement and success. Nongraded schools have become nongraded because of their belief that grades are stumbling blocks to the expression of this philosophy. Nongraded schools believe that, because pupils vary widely in learning potential and actual achievement, they can best discard emphases on uniform grade norms, use of standard sets of materials within age groups, uniform teaching methods, inappropriate marking procedures and detrimental retention and promotion policies by discarding grades as a form of organization. A school should not consider a form of nongrading unless it is dissatisfied with grading as a means of attempting to meet its educational objectives.

The Penn-Delco School District believes that the charge of public education is to provide a program of academic learnings in which pupils of all abilities can meet feelings of achievement and success while striving toward their aspirations. In the elementary school we feel that language arts, based upon a sound reading program, is the most important academic emphasis. Consequently, a nongraded organization was developed in which reading achievement levels form the basis for pupil groupings. Considering mathematics to be a second priority academic area and one that is developmental in scope and sequence, a system of cross-grouping--a sort of mathematics Joplin plan--was structured.

The most important outcomes of Penn-Delco's nongraded plan are (1) considerable homogeneity of pupil groupings for language arts and mathematics; (2) heterogeneous groupings according to intelligence, social characteristics, personality and so forth; (3) elimination of dummy and brainy groups; (4) emphasis on achievement and success rather than arbitrary grade standards; (5) elimination of grade failures; (6) continuous progress through promotions at any time from group to group and classroom to classroom; (7) emphasis upon attainable goals for all pupils in the content subjects and (8) development of a wide variety of instructional materials.

Additional Information:
School district: Penn-Delco School District
County: Delaware
Grades: Nongraded elementary
Pamphlet available upon request

Contact person: Walter M. Rhoades
Assistant Superintendent
Penn-Delco School District
Aston, Pa. 19014

LEARNING DISABILITIES PROGRAM

The Penn Hills School District is presently conducting a special program of developmental learning as a part of the regular elementary school curriculum. This program is intended to supplement learning experiences in reading for those children who appear to be evidencing some difficulty in perceptual, visual and/or auditory development of reading skills.

The developmental learning program is providing systematic instruction to help each selected child to better perceive and respond to the teaching-learning techniques employed in the regular classroom.

The primary aim of the developmental learning program is to help each child improve his ability to receive, differentiate, organize, integrate and respond to all stimuli in his total environment under this program. Selected children in grades 1, 2 and 3 are scheduled for several half-day sessions in a learning center laboratory. As part of this program, a portion of each period is devoted to auditory-motor and visual-motor activities in the gymnasium. The major emphasis is the classroom application of these skills to reading activities.

Children in the primary grades attend the special classes two days a week, for a period of two hours each day. Children who are identified for this special instruction in the upper elementary grades (4-6) attend one day a week, for a period of two hours. All classes are held at the Lincoln Park educational center and transportation is provided for the pupils by the Penn Hills School District.

Children are identified for the program on the basis of classroom performance and/or individualized testing and evaluation as a possible student who might profit from this specialized program.

Additional Information:
School district: Penn Hills School District
County: Allegheny
Grades: 1-6

Contact person: M. Margaret Dimperio
Reading Consultant
Hebron Elementary School
Penn Hills School District
10700 Frankstown Road
Pittsburgh, Pa. 15235

SATURDAY HONORS INSTITUTE

The Penn Hills School District has established a program titled "the Saturday honors institute," designed to meet the needs of children identified as gifted according to suggestive criteria developed by the state department of education. This program is offered on Saturday morning at the Forbes Elementary School from 9 to 12 Noon.

Primary objectives of this program are: (1) to provide extended learning opportunities beyond the regular classroom, (2) to establish an opportunity to pursue special academic interests in greater depth, (3) to stimulate interest in a variety of areas with concentration in one specific area, (4) to develop the students' ability to pursue a special interest in a systematic manner to its ultimate conclusion and (5) to develop the students' potential for future community leadership.

Students selected for the program must possess an intelligence quotient of 130 or higher and be free of serious emotional or learning problems. While grades are significant, it is also realized that many gifted children do not consistently function at the A-B level of achievement. Exceptions to the required 130 intelligence quotient are permitted only for those few students considered gifted though functioning at a lower level, probably due to being educationally deprived because of environmental factors.

The typical Saturday is divided into three flexible time modules. During the first module, all students attend a concentrated project hour with a specialist in science, creative writing and dramatics or mathematics. The second module is for interaction time. Students can consult with other specialists or children to discuss their selected projects or continue individual investigation. The final module has been designated as a "challenge hour." Emphasis is placed on community action under the direction of a social studies specialist. Seminars, movies, displays, field trips and various presentations are scheduled.

Students are encouraged to select a project of interest at the onset of the program and with directed guidance pursue this interest to its conclusion.

Additional Information:
School district: Penn Hills School District
County: Allegheny
Grades: 5-6

Contact person: Andrew J. Yuhas
Assistant Director of Elementary Instruction
Penn Hills School District
12200 Garland Drive
Pittsburgh, Pa. 15235

COMPUTER MATHEMATICS--FORTRAN

Computer mathematics, using fortran language, was first offered as an elective course for juniors and seniors who had completed Algebra I, Geometry and Algebra II in 1967-68.

The purpose of the course is to give students a broader background in mathematics using an IBM 1401 computer as a tool in solving pertinent problems.

In 1967 the computer course enrolled 30 students under one teacher. In 1970-71, there were five sections of computer mathematics enrolling 110 students under two teachers. Classes meet five periods a week. During the early weeks of the course, the students spend three periods per week learning Fortran IV and related material and two periods in a laboratory situation with computer "hands on" experience. During the last half of the school term, we give the student two hours of lecture and programming and three hours of "hands on" experience. We have found that a prerequisite for initiating a sound computer mathematics course is having a teacher or teachers thoroughly trained in computer science.

Additional Information:
School district: Pennsbury School District
County: Bucks
Grades: 7-12

Contact person: Ronald P. Seacrist
Curriculum Coordinator
Pennsbury School District
Yardley Avenue
Fallsington, Pa. 19054

ELEMENTARY SCHOOL MATHEMATICS

The Pennsbury School District participated in an early experiment using "new math." We feel that this early experience with authors of textbooks on modern mathematics and workshops involving our teachers gave us the needed experience with materials that allows us to develop a program for the individual needs of children. Our program is nongraded and based on the structure and use of mathematics.

The program that is in use in our schools today is "modern school mathematics, structure and use." We adopted this program in 1967 and have added many innovative techniques and ideas being used in the program. At any grade level, students are "streamed" into either two, three or four groups depending on their mathematics achievement. The students are moved within these groups as their achievement levels change.

One measure of our program's success is standardized testing. On the sequential tests of educational progress (STEP) mathematics test, our students at all levels consistently score above their counterparts on the national norms group.

Additional Information:
School district: Pennsbury School District
County: Bucks
Grades: K-6

Contact person: Ronald P. Seacrist
Curriculum Coordinator
Pennsbury School District
Yardley Avenue
Fallsington, Pa. 19054

A SIX-WEEK SUMMER REMEDIAL READING PROGRAM

The program is designed to aid economically and educationally disadvantaged students who have learning difficulties hindering their progress in school. The six-week summer program provides for individualized instruction and specialized services designed to help the culturally and educationally disadvantaged student find greater success in school.

Specialized equipment for the identification of weaknesses and special material to strengthen these weaknesses are utilized in small group instruction with groups of eight to twelve pupils per teacher-counselor. The student's cultural background is enlarged by field trips and follow-up studies about interesting sights and sounds in the Philadelphia-New York area. Individual conferences with a guidance counselor, a psychologist and a psychiatrist identify personal problems whose solutions may help the students improve their self-image. To increase learning opportunities, reading lists are expanded to include books with high interest and low vocabulary level.

Efforts are made to reduce medical, dental and psychiatric blocks to learning, thereby modifying some underlying causes of deficiency in reading and communication skills.

Evaluation includes:

1. Surveys of pupil, teacher and parent opinion about changes, if any, in reading habits and attitudes about school and reading.
2. Results from pre and post standardized testing.
3. Follow-up of pupil progress in regular term school.

Additional Information:
School district: Pennsbury School District
County: Bucks
Grades: 1-10

Contact person: William W. Ingraham
District Superintendent
Pennsbury School District
Yardley Avenue
Fallsington, Pa. 19054

TWO-YEAR SECONDARY SCHOOLS

The 2-2-2 secondary school organization was initiated in 1956 to limit the age and interest range of students within a building, and to ensure a single senior high school of manageable size. In this district of 14,000 students, secondary schools housing students in two grades only have fewer control problems, provide increased opportunities for students to sample a wider offering of courses and activities and offer a range of classes for students of marked differences in ability and achievement. Furthermore, library and other materials of instruction can be provided in greater depth when fewer levels must be served.

At present, two junior high schools house 7th and 8th graders, two high schools house 9th and 10th graders, and one senior high school houses 11th and 12th graders. The senior high school serves the whole area and provides the social mix for the entire district. All students graduate from one school and identify with the school bearing the name of the district.

To minimize problems of articulation, full-time 12-month curriculum coordinators supervise instruction and provide curriculum leadership on all levels. Furthermore, activities are organized both by building and by district. For example, each high school (grades 9-10) fields an interscholastic junior high football team composed largely of 9th graders.

Reassigning a portion of staff, some each year, and continuous curriculum in-service activities prevent the development of "little empires" and encourage planning and thinking in terms of the district, not individual buildings. With the growth of district pupil population, the senior high school building will be expanded and additional lower level units will be constructed as needed.

Additional Information:
School district: Pennsbury School District
County: Bucks
Grades: 7-12

Contact person: Richard L. Currier
Assistant Superintendent
Curriculum and Instruction
Pennsbury School District
Fallsington, Pa. 19054

PROJECT PLAN--AN INDIVIDUALIZED INSTRUCTION PROGRAM

Project "program for learning in accordance with needs" is a new way of learning based on the idea that individual students should work on what they were ready to learn and what they would need in their life. This is the concept 5th grade participants have of their new approach to learning.

Project PLAN makes use of educational materials already available on the market, but implements their use by employing a computer.

Project PLAN differs from the popular concept of computer teaching in that teachers, not students, do most of the learning from the computer.

The teachers are trained to use the computer to help them plan, schedule and record the progress of each student in certain subjects.

Students, on the other hand, use a variety of learning methods. But the computer records educational progress through tests taken at regular intervals and thus is able to show the teacher which method is best for each student. The theory is that no one method of teaching is superior for all students, but that different students can learn faster by different techniques.

Project PLAN aims to find out the best way for each student. This is not an effort to develop something new, just an individualistic approach to using what we have available.

Additional Information:
School district: Penn-Trafford School District
County: Westmoreland
Grades: 1-12
Pamphlet available upon request from: Department PLAN
Westinghouse Learning Corporation
2680 Hanover St.
Palo Alto, Cal. 94304

Contact person: Richard L. Robinson
Superintendent
Penn-Trafford School District
Administration Building
Harrison City, Pa. 15635

INTERDISCIPLINARY APPROACH TO CONSUMER AND HOMEMAKING EDUCATION

The purpose of this project is to seek ways to make consumer and homemaking education available to all secondary school students in the district. In recent years problems of the consumer have taken on major proportions. On a national level the problem prompted President Johnson to appoint a director of consumer affairs. President Nixon has continued the position. On the state level, Governor Shafer also appointed a director of consumer affairs. The investigations by Ralph Nader into various consumer products has also served to highlight the needs for a sound consumer education program.

Through the guidance and direction of the homemaking department with the support and cooperation of the curriculum office, it is the intent to develop a consumer education program on an interdisciplinary basis, which will be woven into the fabric of the total secondary curriculum. Since consumer education is a life-long process, today's students need to be given direction in order to start on the right road. The essence of consumer education is not restricted to a particular area, but permeates all. This requires an effort of developing and coordinating a program with consistency, relevance and integrity.

It is felt that the homemaking department is the natural agency to coordinate the program because of its sensitive role in teaching home management, foods, clothing, budgeting and other vital consumer education areas. By making consumer education available to all secondary students, it will make them wiser and more intelligent shoppers whether for small household items, luxury items, staples, the more expensive items such as automobiles and homes or intangibles such as insurance. The program developed may well serve as a pilot program for other school districts in the area and beyond.

Additional Information:
School district: Peters Township School District
County: Washington
Grades: 6-12

Contact person: Kenneth Chuska
Curriculum Coordinator
Peters Township School District
625 E. McMurray Road
McMurray, Pa. 15317

AEROSPACE MAGNET PROGRAM

Magnet high schools, each featuring a specialty while continuing to meet the broad needs of students in a comprehensive high school, began operation in September 1966. These schools were designed to improve the quality of educational opportunity within the school by concentrating developmental efforts on creating units of exceptional excellence in curriculum and instruction, by testing newest materials and equipment and by promoting integration through attracting students and teachers from the entire school district.

Space-minded boys and girls, with ability and interest in aeronautics and space science, are invited to apply for admission to the Aerospace Magnet Program at Northeast High School. Nearly 450 students, representing 27 different schools and every district in our city, are presently participating in this college preparatory program.

Special science courses include space biology, space chemistry, space physics and aerospace technology, emphasizing scientific approaches to the particular discipline.

Innovative aspects include a lecture series by guest speakers on current topics in space science and related areas and a fully automatic teaching machine with advanced and review subjects.

After school activities include, but are not limited to, computer mathematics using a Hewlett-Palkard 2000B; metallurgy using physical chemistry techniques in research study and Project Space Research Capsule in which national recognition has been given to the flight control simulation research of this group. The Apollo-type space simulator, operated by the students, houses three student astronauts during test operation. The activities are all inclusive involving flight simulation, computer programming, mechanical and electrical design, medical life-support and psychological studies.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades 10-12

Contact person: Robert A. G. Montgomery Jr.
Coordinator, Aerospace Magnet Component
Northeast High School
School District of Philadelphia
Cottman and Algon avenues
Philadelphia, Pa. 19111

AGRICULTURE EDUCATION

Demands by parents, pupils and employers for a more functional agricultural program caused this school to initiate new programs and update its existing ones. Objectives are to provide instructional programs in the agricultural sciences for students in an urban area to meet their interest needs, to develop agricultural competencies needed by individuals engaged in or preparing to engage in agricultural occupations, to build a sound foundation for continuing education in the agricultural sciences.

All students in this school, which is located on a 78-acre farm in the City of Philadelphia, are enrolled in agriculture. Prior to starting its new program, the school stressed only one agriculture course--agriculture production. New courses in agriculture business, turf management, meat cutting, agriculture machinery sales and service, commercial horticulture and animal technicians training have been added. Students in 9th and 10th grades will receive an exploratory general program in agricultural subjects while 11th and 12th grades will select one of the 10 specialized areas for concentrated instruction. To facilitate instruction in these areas, a dairy barn, meat cutting laboratory, animal technician's laboratory, commercial size greenhouse, large agriculture mechanics' shop, a new library and two additional science laboratories have been constructed. As a result, more students are on work experience jobs in relation to their training, students are more aware of the agriculture related jobs in the city area and more students are enrolling in agriculture curriculums in colleges.

A full comprehensive academic curriculum is available for students who are college bound. This includes a foreign language, advanced mathematics and science courses.

The Philadelphia Chapter of Future Farmers of America, largest in the nation, functions as an integral part of the instruction in vocational agriculture to provide students with experiences in citizenship, scholarship and leadership activities.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades: 9-12

Contact person: Ralph E. Bartholomew
Principal
Walter Biddle Saul High School of Agricultural Sciences
School District of Philadelphia
7100 Henry Ave.
Philadelphia, Pa. 19128

ART AND THE ARTIST

"Art and the artist" engages professional artists of local and national reputation to do a demonstration painting on the stage of junior and senior high school auditoriums for students from 800 to 1,600 in number. The purpose of these programs is to bring young people in closer touch with the artists in our community, to see a painting evolve and, through a commentator who is an adjunct to this program, to learn the relationship of art and artists to their own art work in school and to their future enjoyment of the arts of their city.

This program has received favorable attention in Philadelphia and beyond and is regarded as the only program of its kind in this country. It has been reported in local and national publications, and was demonstrated at the National Art Education Association convention here in 1965.

This is one of the most vital and effective means of bringing live art and outstanding artists to the attention of thousands of young people. The response to these presentations has been enthusiastic and a number of other states have requested guidance in helping them to initiate a similar program.

Each artist spends approximately three hours in the studio preparing for this program, and remains in school for the entire morning, generally from 8:15 to 12, visiting the art classes after the performance on stage. Also, the artist often permits his or her painting to remain in school for a period of time so students may have a closer and more extended view of it. Funds for these artists have been provided for in the budget of the Division of Art Education. Canvas, paints and all other materials, however, are supplied at the artist's own expense.

In 1968, the program was expanded to include sculptors. Heretofore, only painters had demonstrated. This innovation is meeting with considerable success.

Additional Information:
School district: Philadelphia City School District
County: Philadelphia
Grades: 7-12

Contact person: Jack Bookbinder
Director of Art Education
Philadelphia City School District
Parkway at 21st Street
Philadelphia, Pa. 19103

BUSINESS EDUCATION

The school district began in 1966 to develop "magnet" programs in various subject areas throughout the city. These programs were to be of such excellence that pupils would be attracted far beyond the normal school boundaries. By this means greater opportunities for skill development would be provided and racial and ethnic integration would be encouraged. The business education magnet program is located in the annex of the John Bartram High School in a large open area without dividing walls. Students work in an office atmosphere and as many as five different learning activities are going on at the same time. Subjects being taught are computer data processing, key punch, machine transcription, office practice, legal and medical stenography. Beginning in September 1971, an experimental program was given which introduced students in the 10th grade to data processing, key punch, office practice and clerical typing in order to help them to select skill clusters for more intensive study in the 11th and 12th grades.

Future plans include a large computer with disk memory, more team teaching and greater integration of subject matter.

Shared-time students from two Catholic high schools are integrated into the various subject areas with the Bartram students.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades: 9-12

Contact person: Bernard J. McDonnell
Assistant Director for Business Education
School District of Philadelphia
2600 N. Broad St.
Philadelphia, Pa. 19132

DRIVER EDUCATION

This program was instituted mainly because of the tremendous social problems shown in the accident statistics. In addition, community pressure helped persuade this school district to start driver education. The program endeavors to show young drivers the effects of physical, mental and emotional traits on safety. It points out their own deficiencies which may affect their driving practices and helps them take steps toward compensating for such deficiencies. It also teaches sound principles and practices fundamental to safe driving and helps develop the skills necessary to carrying out these principles. Attitudes are developed toward sane and responsible use of the highways, sincere acceptance of the drivers' responsibility toward conservation of life and property and the support of further development and improvement of traffic conditions through programs of engineering, legislation, enforcement and education.

These objectives are pursued in a three-period per week course. Two are classroom instruction and one is a practice driving session. The course is five months in duration. Studies by the state department of education indicate that driver education students have one-third the number of accidents and one-fifth the number of arrests as students who are untrained. Evaluation of the driver education program in this district substantiates these statistics.

In conformance with Act 527 (Point System) of the Pennsylvania Legislature, an eight-hour course is conducted by the Division of Safety Education in the adult evening school program with an estimated 1,000-1,500 violators per month. The expertise of our regular driver education teachers and supervisors in the program is helpful.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades: 10-12 and Adult

Contact person: Isadore Isakoff
School District of Philadelphia
Parkway at 21st St.
Philadelphia, Pa. 19103

ENGLISH AS A SECOND LANGUAGE FOR SPANISH-SPEAKING CHILDREN

Because of the increasing number of Spanish-speaking children arriving from Puerto Rico, this large city district decided to provide a program to help eliminate the resultant language barrier. The program aims at improving their overall performance in school, improving their proficiency in verbal and nonverbal use of English, bettering their emotional and social stability and that of their families and lowering the dropout rate of the schools.

Through the utilization of bilingual teachers in English and Spanish, the district maintains a close liaison between the school and the Spanish-speaking community. Since stress is placed on improvement of the children's Spanish-speaking abilities and English is offered as a second language, pupils and their parents are most receptive to learning English. They feel that the school is not trying to stamp out their language and culture but is actually adding to it.

Audiolingual techniques used in the English phase of the program stress the development of the listening and speaking skills. Reading and writing assignments are based on material previously learned orally and aurally. The instructional materials presently being used vary from school to school, since preexamination of the materials didn't reveal any one method which was sufficiently superior to the others. Evaluation of the results of using these various materials may narrow the diversity.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades: 1-10

Contact person: Eleanor L. Sandstrom
Director, Foreign Language
School District of Philadelphia
Parkway at 21st St.
Philadelphia, Pa. 19103

GAMING AND SIMULATION

An exciting new approach to learning is the area of computer-based games. Computer-based games, a form of simulation, involve students in a learning experience in which they, not the teachers, exercise control. Games can promote discovery by simulating events, decision strategies and problems. Games provide opportunity for decision-making and approaches not easily experienced in the classroom.

The Division of Instructional Systems of the School District of Philadelphia has conducted a program in this area for the past two years utilizing the sumerian economics game which was developed at the Board of Cooperative Educational Services, Yorktown Heights, N. Y. This game was implemented through the use of an IBM 1050 audio-visual terminal connected by telephone lines to a computer at first at John Hopkins University and later to one at BOCES.

Realizing that expansion of this particular program was impossible under the current procedure of using computers located at such a great distance away because of the high phone line rates, an alternate approach was explored and is currently being implemented.

A new game, Smogtown, was authored by the staff of this division and is being played by students at the Hancock School. The program is played at Teletypewriter terminals connected by local phone lines to a Hewlett-Packard 2000B computer located at the school district's instructional computer center. A student playing Smogtown assumes the role of the mayor of a city with an air pollution problem. The computer plays the role of the "city manager." The "mayor" must make decisions which affect the pollution level of the city, such as whether or not to allow industry to locate in the city.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades: 5-6

Contact person: Sylvia Charp
Director, Instructional Systems
School District of Philadelphia
Fifth and Luzerne streets
Philadelphia, Pa. 19140

GET SET DAY CARE

The get set day care program provides the highest quality day care service for children of low-income families. This may mean caring for children as long as 11 hours. The design of the program encompasses emotional, social and physical development.

The program has for its objectives for the child to provide care, protection and appropriate daily living experience that will promote the total development and well-being of the child, to compensate for deficiencies which may have developed because of a disadvantaged environment, to stimulate and develop positive interests and attitudes and basic learning skills conducive to the achievement of their fullest potential, to assist in the development of a positive self-image, to provide an experiential situation that will increase the chance of success in future education programs.

For the family, the objectives are to enable parents who desire to work or enter training programs to do so with the assurance of quality care for their children, to enable parents who are unemployed or under-employed avail themselves of job training opportunities, to provide over-burdened and handicapped parents supplemental help in the rearing of their children, to help the family to make more effective use of community resources and services, to help parents understand how children grow and develop, to provide parents with information and techniques to be used by them to nurture the growth and development of children, to increase interaction between the parent, the community and the program.

The program includes the educational, social and health aims and content of a good daily program for children at this age level. Each group of children has its own teacher and assistant. Adequate provision is made to provide staff in shifts to accommodate an extended day.

Features which meet the children's needs include naps on cots, midmorning snack, hearty noon meal, snack after nap, solitary and group activities are among the planned activities. The staggered arriving and leaving times of the children in this program require a staggered staffing schedule to accommodate the 7 to 6 operation.

In all classes there is a balance of various elements arranged according to the needs of the children in the groups. This includes individual choice and structured activities under the guidance of the teacher and with a variety of materials and situations. They have trips and visits to explore the immediate and the outside community. Opportunities are provided to increase communication skills, develop mathematical concepts, science understandings and creativity in art, music and dramatics. Children learn classroom behavior and procedures as a tool for group living and as an important socializing process.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades: Preschool and school

GET SET DAY CARE (Cont'd.)

Contact person: Jeffrey O. Jones
Director
School District of Philadelphia
Ninth Floor, Administration Annex
219 N. Broad St.
Philadelphia, Pa. 19107

THE GRATZ MINI HIGH SCHOOL

The mini-school is housed in a storefront facility of the Tioga Community Youth Council. This affiliation has insured a strong community support that can and does carry over to a student's after school activities. Gratz students who are recommended for the mini-school by teachers and counselors are usually emotional problems, over-age 10th graders, chronic cutters and poorly adjusted to the regular Gratz program. A vice principal, John Glenn, interviews the students and their parents, making use of such help as is available from counselors, school nurses, psychologists and community agencies. The school is headed by Paul Turner, a strong, black male figure, who can and does relate to the young people who come to the school. He is assisted by part-time teachers in reading, science and typing.

The curriculum is based on the regular program so that a student does not lose time from school. Department heads and vice principals work closely with Mr. Turner to insure a relevant curriculum with plenty of hands-on experiences. When the mini-school faculty decides that students are ready to return to Gratz, they are once again interviewed by Mr. Glenn, and the counselor works closely with the roster office to prepare a "hand tailored" roster that will minimize the students' future problems and difficulties.

One strong effect of the mini-school has been the breaking of the Boone-Cornman Syndrome by having students who might otherwise go to these schools stay in a sheltered school environment, limited in numbers (capacity is 20 students). The rate of recidivism is almost nonexistent, current attendance is about 90 per cent, costs are within the capacity of the current school budget. Cooperation among parents, community organizations and neighborhood leaders has helped to produce a model situation. One proof of this has been the declining backlog of students referred to Boone or Cornman schools.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades:

Contact person: Paul Turner
School District of Philadelphia
Parkway at 21st St.
Philadelphia, Pa. 19103

THE INTENSIVE LEARNING CENTER

The Intensive Learning Center is an arm of the Office of Policy Planning and Development. It began operations during the 1968-69 school year.

The ILC has four missions to fulfill for the school district:

1. Direct services to students. The ILC provides a complete educational program for elementary school children, emphasizing individualized instruction in basic skill areas. The primary function of the ILC is intellectual growth.

2. Curriculum research and development. The ILC uses a variety of new developments in technology, curriculum materials, teaching methods and staff organization. Curriculum development specialists have developed new curricula in computer-assisted instruction, humanities, music and interplay.

3. Staff development. The ILC provides training and work experiences for existing Philadelphia teachers and new personnel in cooperation with the Office of Policy Planning and Development.

4. Dissemination and diffusion. This mission pulls together each of the three stated above. It includes providing information, training staff and packaging curricula, methods and materials for implementation in participating schools.

Students at the ILC are selected from overcrowded schools in large groups from one or two grades. Parents must consent to the transfer to the ILC.

Funds for the center are provided from an ESEA Title III grant from the federal government.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades: K-6

Contact person: Oscar W. Knade Jr.
Director
School District of Philadelphia
Fifth and Luzerne streets
Philadelphia, Pa. 19140

THE LEARNING DIMENSIONS PROGRAM

This program is based on the developmental theories of Piaget. It is a staff development program which includes (1) investigation into stages of cognitive development of children ages 5 to 11, (2) ascertaining those stages of development with classroom teachers so that activities to strengthen those stages may be strengthened and increased in day-to-day classroom work and (3) providing subject areas and their various contents as the subject of study for classroom teachers so that they may eventually integrate content around the needs and interests of the children. The arts--visual, dance, drama, creative writing, music--are conceived as strengthening fibers in the learning process, hence in staff development, wherein they are used as integrating forces. The basic model for changing teacher behavior is the English primary school model of the integrated day and activity-centered classroom.

The program presently (1971-72) involves two elementary schools, K-6. Both schools represent poor ghetto communities, with school populations having severe learning difficulties. The evaluation model is based on a staff development design and research consists of ascertaining teacher stages of development in a change model. Teachers are involved in their own self-evaluation of their stage of development. Total school staffs are involved--faculties, principals, guidance, reading, library, art and music personnel. The staff of three on the learning dimensions program helps the total school staff ascertain goals and work to carry them through to the evaluation stage.

The program model deals with total staff involvement, with a regularly placed faculty and supportive staff, rather than a specially placed one. To function effectively, textbooks are omitted in favor of art and instructional supplies, plus additional media equipment such as Polaroid cameras and film, closed circuit television, film loops and projectors, photographic equipment.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades: K-6
Pamphlet available on request

Contact person: Margaret Bingham
Director
Learning Dimensions Program
W. F. Miller School
School District of Philadelphia
Howard Street
Philadelphia, Pa. 19122

VETERANS IN PUBLIC SERVICE

The veterans in public service program is one designed to provide higher education for returning veterans who wish to become elementary school teachers. The rationales involved dealing with providing (1) male images for inner city students, (2) higher education for high risk personnel, (3) additional adult assistance for students of the inner city and (4) daily exposure to the lives and circumstances of the students they will soon be teaching.

This is a three-faceted program with each phase supporting the other. Within the schools, the men work in one-to-one or small group tutorial situations assuming full class responsibility from time to time under teacher direction. Outside the school, the men work in the community either in conjunction with existing community agencies or in programs of their own design to further their awareness of the life styles of the students outside the school environment. At Temple University, the men attend evening classes gaining knowledge and skills that can be applied to their in-service experience while earning an undergraduate degree in education.

Because many of the VIPS are themselves products of the inner city they are able to bring to the learning situation unique styles of communication. A part of their unique approach is unquestionably related to their unique role, since they do not belong to any of the existing paraprofessional classifications. They are not nonteaching assistants, student teachers or interns. They are undergraduate teachers-in-training being prepared to work in a specific type of school.

Students are able to receive individual instruction in areas of weakness or accelerated programs in areas of strength. Women teachers are able to refer boys needing a male image to someone within the school who has the time to talk with them, nonthreatening, but as an interested adult.

Additional Information:
School district: School District of Philadelphia
County: Philadelphia
Grades: Adult
Pamphlet available upon request

Contact person: William Williams
Room 804
Stauffer Hall
Temple University
Philadelphia, Pa. 19122

AUDIO-VISUAL SERVICES PROGRAM

This program was initiated to meet the need for comprehensive instructional services essential to the total teaching-learning environment of the economically and educationally disadvantaged student.

The audio-visual center, which is centrally located, provides facilities for producing, storing and distributing instructional materials and equipment. To facilitate the distribution of materials and equipment, a mobile unit is used on a planned schedule. Essential mimeographic, duplicating, mounting, preservation and photographic equipment have been installed in the center. A teacher's catalog, updated annually, of services and materials is published by the center. A full-time audio-visual director, full-time secretary and a part-time van driver staff the center.

Student involvement is the keystone of the audio-visual program operation. Student activity centers around the audio-visual clubs, newspaper clubs, work programs and photography clubs at the secondary level and the newspaper and art units at the elementary level. The clerical and secretarial work experience program and the art experience program bring many students into close association with the operation of the center.

Teacher in-service programs have been held to promote understanding in the use of classroom equipment and in the use of production equipment. A continuing program of teacher training and assistance is available to all teachers on request.

That the program is successful is evident by the growing number of students involved in its services and operation and is steadily increasing demand for the services and materials of the center.

Additional Information:
School district: Philipsburg-Osceola Area School District
County: Clearfield
Grades: K-12

Contact person: Joshua G. Harrington
Coordinator-Federal Programs
Philipsburg-Osceola Area School District
Philips Street
Philipsburg, Pa. 16866

AMERICAN HISTORY ADVANCED PLACEMENT

The course in advanced placement American history permits able and ambitious students to pursue college-level study while in high school. It prepares them for an American history college entrance board examination and enables them to be considered for advanced placement, advanced credit--or both--by the colleges which they enter. Three Pittsburgh high schools have taught the course every year since 1959. Committees of Pittsburgh teachers have twice revised the syllabus, the last time in 1969.

The course deals with the main issues of United States history. It uses a college text, source books and monographs, some of which treat interpretation. It stresses logical thinking and clear writing, so important to success in advanced placement history examinations. It relates continuing issues to persisting current problems. It stimulates students to make historical interpretations and teachers to use a variety of techniques.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grades: 11 (open to eligible students who wish to take course in 12th grade)

Contact person: Helen M. Kiester
Supervisor, Social Studies
Board of Public Instruction
Pittsburgh School District
Administration Building
341 S. Bellefield Ave.
Pittsburgh, Pa. 15213

CENTERS FOR MUSICALLY TALENTED

The general objectives of the program are to provide students an opportunity to develop a high degree of individual artistic talent and to stimulate the development of the cultural potential in the community.

Specifically, the program is designed to deepen and broaden functional musicianship which includes the exploration of the structure and organization in music. Students become involved with the standard and contemporary concert repertoire. This personal indepth application develops the creative potential of the musician and stimulates consideration of career opportunities in the many fields of music and music education. The multi-faceted program offered in the centers is a model curriculum for advanced music study.

Instruction is involved with private study, small ensemble classes and theory lessons. The materials studied are correlated between the different activities, utilizing a team effort approach. Coupled with the instructional aspect, discovery experiences are provided which utilize artist-consultants and participation with community, colleges and national musical organizations, i.e., symphony, opera, composers, conductors and chamber groups.

Students are selected by audition from city and diocesan high schools in Pittsburgh and the program involves approximately 250 students (125 instrumental and 125 vocal). The faculty consists of 20 instrumental teachers and 19 vocal teachers. Four theory teachers are also employed. The teaching staff is recruited from the faculties of Carnegie-Mellon University, Duquesne University, University of Pittsburgh, Mount Mercy College, Chatham College and master teachers in Pittsburgh.

Classes are conducted every Saturday afternoon from 1 p.m. to 4:14 p.m. in the Frick Elementary School (vocal) and Fifth Avenue High School (instrumental), which are two schools in the Pittsburgh public schools.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grades: 8-12
Pamphlet available upon request

Contact person: Stanley H. Levin
Director
Pittsburgh School District
Bellefield and Forbes avenue
Pittsburgh, Pa. 15213

COMMONWEALTH CONSORTIUM COMPUTER-ASSISTED INSTRUCTION

The Commonwealth CAI Consortium is made up of four organizations: the school districts of Pittsburgh and Philadelphia, the Department of Education and the Pennsylvania State University. Effective March 16, 1968, the consortium was activated by an ESEA Title III grant to the Pittsburgh School District in the amount of $326,636 for a 12-month period. The three-year mission of the consortium is to develop and evaluate general mathematics and Algebra I courses for 9th grade students in urban schools. The individualized courses are designed around the use of a modern instructional computer by teachers and pupils. Instructional representatives with teaching experience in the city high schools of Pittsburgh and Philadelphia are working together with mathematics educators from the university staff to produce this new curriculum.

The regular classroom teachers assigned to teach the CAI courses have been trained to function in their new role as managers of student learning, including "on line" and "off line" activities. Thirty terminals have been installed both in Schenley High School, Pittsburgh, and in Lincoln High School, Philadelphia. Fifteen terminals have been placed in each of two classrooms at each location. The mathematics curriculum for each course has been divided into two carefully articulated components, "on line" (at the computer-connected station) and "off line" (at individual study areas). The typical middle-ability student covers about one-half of the mathematics program in each component, with variations from this norm for students of other ability levels. Operating at peak efficiency, each man-machine system provides instruction for approximately 500 students in each city.

The main function of the on-line material is to present to students instruction in Algebra I and general mathematics. A record is kept of the student's interaction with the program via the computer. Extensive remediation, drill or enrichment materials have been provided for off-line activities.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grade: 9
Descriptive material available upon request

Contact person: Francis J. Rifugiato
Director, Division of Curriculum
Pittsburgh School District
341 S. Bellefield Ave.
Pittsburgh, Pa. 15213

COMPENSATORY EDUCATION PROGRAMS

In an attempt to enhance the program in schools situated in deprived neighborhoods and to off-set some of the disadvantages faced by students in these schools, a program of compensatory education has been instituted. Preprimary classes and a team teaching organization are major undertakings in this multi-faceted effort.

It is felt that attention to the early years of childhood is necessary if economically deprived children are to cope with later education on the same bases as more advantaged children. Twenty-seven classes for three and four-year old children have been organized under "head start." Fifteen children attend each morning and 15 different children each afternoon. The staff consists of a teacher, a child-care aide and a food service aide. There are also itinerant specialists in eurythmics and language arts. The program is basically a child-development approach with special concerns for health, social service, nutrition and parent participation. In-service training for teachers and work with parents take place each Friday afternoon.

Twenty-eight classes of 15 children each are organized under Title IV, health, education and welfare as day care centers. Children receive care from 8 a.m. to 6 p.m. Comprehensive service is offered in health, education and social work.

Two curriculum approaches are being tested in these centers and are linked into the kindergarten-primary cycle:

1. The free learning environment allows the child to sample from a wide variety of learning experiences provided by the teacher in six specifically arranged learning centers: social studies, creative arts, mathematics, language arts, perceptual motor and science. The children are free to choose their activities and to sample from a wide variety of materials and information. The teacher's role is supportive and enabling in small group or individual instruction.

2. The primary education project is a program of individualized instruction. A graded curriculum through which the children can work at their own rate is used. The skills taught are broken down into hierarchies of simpler skills which are taught in a specified sequence. The skills include sensory discrimination, basic mathematical concepts, classification, verbal and logical processes and perceptual motor skills. A series of diagnostic tests has been developed which tells the teacher which series of skills the child is ready to learn.

Teaching teams at the primary and intermediate level consist of about five teachers who meet weekly under the guidance of a team leader to plan schedule, deploy children, adapt curricula and otherwise determine program through the needs of children on the team. A local woman known as a "team mother" serves as a nonprofessional on each team.

COMPENSATORY EDUCATION PROGRAMS (Cont'd.)

Eighteen schools have added the vertical dimension of a nongraded organization. This permits even greater flexibility by allowing the students to move at their own pace through sequential steps of learning. Committees of teachers have worked to develop guidelines and tests applicable to a nongraded approach.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grades: preprimary-8
Pamphlet available upon request

Contact person: Phyllis A. Lewis, Director
Compensatory Education
Pittsburgh School District
341 S. Bellefield Ave.
Pittsburgh, Pa. 15213

ENGLISH INSTRUCTION, LINGUISTICS

The program was initiated to use the new approaches developed by linguists to the study of language in the high school. Because the television program is no longer used and because an effort has been made to develop a continuum in the linguistics approach to language arts grades 6-12, a committee of teachers revised the course of study and provided lesson plans using available materials from recent linguistic sources and the television series. These plans emphasize the English patterns of speech rather than any one particular approach to the science of linguistics.

The classroom teachers, utilizing the findings of linguistic scientists, approach the study of linguistics inductively in order to make students aware of the basic structure of the science of linguistics. Students are aided in building more effective sentences by the implementation and incorporation of English sentence patterns. The concept of sentence patterns is introduced in grade 4 and continues to be emphasized through grade 12.

Evaluation of grades 4-8 has been informal but in grades 9-11 evaluation has been that all students take the same teacher-made test.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grades: 4-12

Contact person: Jane C. Tygard
Associate Director of Instruction,
English
Pittsburgh School District
341 S. Bellefield Ave.
Pittsburgh, Pa. 15213

EXTENSION, ADULT AND TESTING PROGRAMS

Heavy community need in an urban area for general and vocational training for adults led to the establishment of the extension education program in a city district.

The program aims to develop any and all effective courses for adults to continue GED testing program for high school diploma, to continue ABE program to combat illiteracy and to meet general and particular educational needs of adults.

Specifically the program employs regular classes that move at the speed and level of the adults involved while seeking out new methods for learning and getting the adults who need it into the schools.

More adults are finishing high school and some continue their education at the higher education level.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grades: K-12 and adult

Contact person: Lucille W. Campbell
Director of Post-Secondary Education
Pittsburgh School District
Connelley Skill Center
1501 Bedford Ave.
Pittsburgh, Pa. 15219

FOREIGN LANGUAGE ADVANCE PLACEMENT

Increased interest within the school and community in the study of foreign languages spurred the initiation of a program for advance placement in French, Latin, German and Spanish. Several teachers in our school system visited schools with well-established programs and, after a close examination of their programs, devised a course for students in the Pittsburgh School District. Each year certain teachers have attended the advanced placement conference.

The Acorn book is used as a guideline for the program and the new courses of study begin to build the reading program at the third level. So that students may better relate literary works to their historical and cultural setting, independent reading is stressed. Students are aided in expressing sound and critical judgment of the aesthetic value of such literature. The program supplies a knowledge of the development of literature beginning with the 19th century.

Evaluation using advance placement tests shows that many students are earning above average grades, and each year more students are receiving better grades. As the program progresses, more students and teachers will become involved.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grades: 12

Contact person: Mathilde E. Meyer
Associate Director of Instruction of
Foreign Languages
Pittsburgh School District
341 S. Bellefield Ave.
Pittsburgh, Pa. 15213

A HIGH SCHOOL CURRICULUM IN THE FINE ARTS FOR ABLE STUDENTS

This program began as a joint curriculum research effort staffed by selected personnel from the Pittsburgh School District and Carnegie-Mellon University. It grew out of a desire to enrich the public school curriculum for the able students in the area of the fine arts. It was realized that many talented students shy away from the arts because they have developed no special talents as performing artists. This program was designed to increase the students' interest in the arts, to help them understand the significance of the arts in their lives and to point out the similarities and dissimilarities among areas of fine arts.

The five-year sequential program is based on visual, aural and kinetic concepts and practices. It is an activity-centered program where skills are generally deemphasized and a stress is placed more on the process than the product. After the first-year pilot curriculum was prepared, it was introduced into 8th grade at Taylor Allderdice High School. An additional year of the program has been completed and the Pittsburgh School District is currently working on the implementation of the next level.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grades: 8-12

Contact person: Mary T. Walsh
Associate Director of Instruction
Scholars Program
Pittsburgh School District
341 S. Bellefield Ave.
Pittsburgh, Pa. 15213

PRIMARY EDUCATION PROJECT

The "primary education project" is a joint venture of the Pittsburgh School District and the University of Pittsburgh to develop a system of individualized instruction for young, urban children from 3 to 8 years old. This system includes:

1. A comprehensive curriculum for cognitive development.
2. Materials to teach each behavioral skill in this curriculum.
3. Plans of school organization for individualized instruction.
4. In-service teacher education programs.
5. Parent involvement programs.
6. Exploratory learning environments.

Thus, the objective of PEP is to create and evaluate a model redesign of the entire school environment, at least through the primary grades. The PEP environment will give each child, whether gifted or culturally disadvantaged, a challenging and reinforcing educational experience during the most critical formative years. PEP is thus addressing itself to the common elements of three of the most critical needs in education today which include individualization of instruction, cognitive learning in the critical early years and correction of the educational deficiencies of the disadvantaged, urban child--a prime factor dividing our cities into two polarized antagonistic societies.

Now in the fourth year of a planned six-year project, PEP is being carried out in 15 classes of the Frick Elementary School near the University of Pittsburgh campus. The program is also being used in two other schools in Pittsburgh.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grades: Preschool-3
Pamphlet available upon request

Contact person: Lauren B. Resnick
Research Director, Primary Education Project
Learning Research and Development Center
University of Pittsburgh
109 Mineral Industries Building
Pittsburgh, Pa. 15213

PROJECT PLAN

To meet the national need for better education and for the selection and evaluation of new, more personalized learning methods and materials, a functioning model of an educational system for the 1970's--Project PLAN--is being put into operation by the American Institutes for Research in the Behavioral Sciences, the Westinghouse Learning Corporation and 12 cooperating school systems in the United States.

The new approach is a systematic one which uses the student and the individual needs as the basic unit in the system and emphasizes evaluation of progress at all stages of educational development.

The functional model of PLAN begins with a tentative plan for the educational objectives to be attained by the student, then assists in attaining these objectives through the use of specially designed modular segments of learning activities and continuously monitors the progress with respect to the attainment of these objectives.

With the computer assuming the bulk of clerical and analytical activities, the teacher is freed to again devote attention to teaching.

Project PLAN is based on the "success" principle. It is intended that a student be assigned only objectives which can be achieved at the present individual stage of learning and development.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grades: 1-12
Pamphlet available upon request

Contact person: Florence E. Learzaf
John Morrow School
Pittsburgh School District
1611 Davis Ave.
Pittsburgh, Pa. 15212

A SYSTEMS APPROACH TO IMPROVING MATHEMATICS INSTRUCTION

Systems Approach to Improving Mathematics Instruction is an innovative curriculum materials package designed to improve the mathematics achievement of 4th grade pupils by providing the teacher with:

1. Forty-two sequential performance levels (basic concept steps) selected from the public school 4th grade mathematics curriculum.

2. Forty-two extension/enrichment performance levels.

3. Appropriate pupil behavioral objectives for each performance level.

4. Films to motivationally introduce basic performance levels.

5. A means to diagnose pupils' learning needs in relation to each behavioral objective of the 42 basic performance levels.

6. A procedure to enable the teacher to differentiate instruction.

7. Resources to enable the teacher to differentiate instruction.

8. A means to evaluate pupils' achievement with regard to each behavioral objective of both the basic levels and the extension/enrichment levels.

The system is built around forty 10-minute color/sound films. The package includes a detailed teacher's manual with step-by-step lesson plans, performance sheets for each performance level, worksheets for each objective, maintenance and reenforcement workbooks, self-instructional materials, twenty 8 mm silent color films, projectors, storage equipment and motivational aids.

During its fourth year (1970-71) SAM was installed in all 4th grade classes of 20 public and six parochial schools with 1,500 pupils and 40 teachers. Project supervisors visit each teacher about once a week. In-service meetings of staff and teachers are held periodically.

The first two years of the project were spent in developing and revising the system and in trial run tests of feasibility. Originally designed for low achievers, SAM has now been modified to make it usable in any 4th grade class by the addition of extension/enrichment levels and materials.

Teachers report that SAM is a great motivator and that SAM pupils enjoy arithmetic. Teachers like the program because it provides for the individual child through more extensive grouping and flexibility than in conventional programs.

Additional Information:
School district: Pittsburgh School District
County: Allegheny
Grade: 4
Descriptive material available upon request

Contact person: Leonard E. Glassner
Project Director
Pittsburgh School District
249 N. Craig St.
Pittsburgh, Pa. 15213

DATA PROCESSING INSTRUCTION
FOR THE SMALL COMPREHENSIVE HIGH SCHOOL

The small comprehensive high school is unable to give hands-on-equipment computer training because of the high cost of computers. This course is designed to determine the feasibility of renting computer time from a local business or school and also to determine the amount of time required to give the student an acquaintanceship with computers and simple programming techniques.

The first six weeks are devoted to a study of unit record equipment in which the fundamentals of data processing are covered. Extensive use is made of both commercially prepared and teacher prepared transparencies.

During the remainder of the semester the course of study includes an introduction to basic computer concepts, principles of computer programming, functions performed by computers, job opportunities in this field and the education required to fill these positions. Students learn enough of a computer language to write several simple programs. The mechanics of the operation of the computer are taught through the school's closed circuit television.

Arrangements are made to rent computer time from a nearby vocational-technical school or a local business to permit students to receive some hands-on-equipment training.

Additional Information:
School district: Pocono Mountain School District
County: Monroe
Grade: 12
Pamphlet available upon request

Contact person: Margaret D. Coates
Chairman, Business Education Department
Pocono Mountain School District
Swiftwater, Pa. 18370

SUMMER SCHOOL PROGRAM

A program of summer school instruction for all elementary and secondary resident students is designed to meet the individual differences of youngsters who will benefit from a remedial enrichment program of a noncompulsory nature during the summer session.

Individual instruction is offered in elementary and secondary mathematics and reading. One block of 80 minutes per day is devoted to a 1:1 pupil-teacher ratio instruction to accelerate an individual's educational program.

Courses are offered, such as elementary school typing, for all students who wish to participate. An evening course is also available for enrichment purposes in the area of basic slide rule instruction.

Basic course offerings include English, mathematics, science, social studies, business education and instrumental music. Emphasis is given to the value of audio-visual equipment and its place in individual instruction.

Professional staff acquisition is no problem since the school district's policy of remuneration is based upon a proration of the succeeding year's salary.

Additional Information:
School district: Pocono Mountain School District
County: Monroe
Grades: K-12
Pamphlet available upon request

Contact person: James Davenport
Administrative Assistant
to the Superintendent
Pocono Mountain School District
Swiftwater, Pa. 18370

INDIVIDUALLY PRESCRIBED INSTRUCTION

"Individually prescribed instruction" is a program designed to accommodate individual differences in students. Reading, mathematics, handwriting, spelling and science programs are based on a sequenced and detailed listing of what a student should be able to do to master a given skill.

Four diagnostic instruments are used to evaluate and diagnose the needs of pupils. Placement tests assess the mastery of units of work along the learning continuum and provide a profile of the student. Pre-tests are assigned to each unit and level of work based on the placement profile. It provides information as to the strengths and weaknesses of each objective within the level and unit of work. A curriculum-embedded test measures progress toward a particular objective. At the end of each unit of work, a posttest is assigned to determine mastery. Each pupil's work is guided by written prescriptions to meet the needs and interest. The teacher's effort is placed upon the needs of the individual rather than the needs of the entire group.

The unique features offered by IPI is that teacher lecturing to a group is minimized, teachers have a constant feedback on the progress of each child, all scoring and the recording of results are undertaken by teacher aides, teachers serve as diagnosticians and prescribers of instructional settings and materials, students are mostly self-directed and work mostly independently and the children work at their own level. Above all, the program is pupil-oriented.

Additional Information:
School district: Quakertown Community School District
County: Bucks
Grades: Reading 1-6
Mathematics 1-6
Handwriting 1-6
Science 1-3
Spelling 3-6

Contact person: Michael Hresko
Principal
Quakertown Community School District
500 Fairview Ave.
Quakertown, Pa. 18951

MIDDLE SCHOOL INDUSTRIAL ARTS

The Radnor Middle School industrial arts program is a broad based curriculum in visual communications, power and industrial materials. The traditional shops--wood, metal and mechanical drawing--were completely remodeled and equipped to house this new program. Each of the three major areas is manned by a different teacher. A common seminar room serves all areas for special activities. Sixth grade boys spend one trimester in each of the three areas. The program for these youngsters provides them with numerous experiences and acquaints them with the potential of the industrial arts facility. The typical 6th grade experiences are:

1. Visual communications: Using drafting, photography and printing skills, the students publish a booklet. The content is determined by the students.
2. Power: Students express in their own way their meaning of power or energy. Each student is given a certain amount of assigned work in the areas of rocketry, wind and water, power mechanics and electricity. Students may diverge from the planned program and explore further into those areas that are of special interest to them.
3. Industrial materials: Classes are organized into small companies. Line production, mass production, the study of the organizational structure of industry and labor relations are typical activities.

Seventh grade boys must schedule at least two trimesters in one of the three major areas. Within a major area, the student may concentrate in one of the many activities available. The program for 8th grade boys and girls is elective for a number of trimesters in any of the major areas. Unique features of the program include:

1. Excellent potential for interaction with the total educational program.
2. Opportunity for indepth pursuit of special interest and ability areas.
3. Capability to "plug in" new technology. Thus, the program is able to keep in step with technological advancements without extensive alterations.
4. Youngsters become more career-minded or aware in a setting that closely parallels our present technological culture.

Early observations indicate excitement and enthusiasm by both teachers and students. Community response has been most receptive. The prime concern at present is to involve more girls.

Additional Information:
School district: Radnor Township School District
County: Delaware
Grades: 6-8

Contact person: Richard Fisher
Coordinator of Occupational Education
Radnor High School
Radnor Township School District
Raider Road and High St.
Radnor, Pa. 19087

GUIDANCE

There was a concern about the high pupil-counselor ratio at the elementary and junior high levels in the project area. Minimum additions required at least one junior high counselor and three additional counselors at the elementary level. With these additions all elementary schools in the project area now have the advantage of this much needed service.

Trained counselors are supplied so that each deprived, disadvantaged or underachieving student in the project area can have the individual contact needed from these trained, sympathetic and helpful adults.

Three elementary guidance counselors will do direct counseling with the students, make home visits to the parents and hold parental conferences in an effort to help the child. The counselors to be provided in the elementary schools in the project area will serve in addition to the elementary counselors now assigned to the schools in the project area.

Additional Information:
School district: Reading School District
County: Berks
Grades: K-12
Pamphlet available upon request

Contact person: Gene Wilkins, Director
ESEA Title I Project
Eighth and Washington streets
Reading, Pa. 19601

GEOGRAPHY

The geography program for the junior high school was instituted in 1961 to give students a greater insight into the problems of Europe and Asia, to give students an opportunity to examine the characteristics of the places on the earth's surface and to study the arrangement and association of things that make one place different from another.

Objectives are to have students become aware of the accessibility of other countries through concepts, geographical techniques and tools; to show appreciation for the culture and religions of the people in Europe and Asia; to show the physical difficulties that people have to overcome because of the lack of communication, transportation and education; to show how climate has an effect on people in their way of life and work activities; to gain a knowledge and appreciation for the role of all races, religions and culture and to appreciate the fact that all peoples of the world are forever struggling with their environment to develop a richer and fuller life.

In preparing for this program, the committee realized that much library material would have to be available when needed. Since the library is well equipped for geographical purposes, the program has proved to be a varied and reliable one.

Additional Information:
School district: Richland School District
County: Cambria
Grades: 7-8
Pamphlet available upon request

Contact person: Nick Campitelli
Principal
Richland Junior High School
Richland School District
Theatre Drive
Johnstown, Pa. 15904

JUNIOR HIGH SCHOOL INDUSTRIAL ARTS PROGRAM

Students at this level are guided through a series of introductory experiences in a variety of industrial arts areas. Included in the program are various levels and classes of drafting, electricity, metals, plastics, graphic arts and woods. Facilities for the teaching of electricity were initiated recently via a Title I industrial arts program.

Special emphasis is given to helping students discover and develop their aptitudes, abilities and interests. Provision is made for the development of a variety of skills and for opportunities for creative activities. A basic understanding of the industrial-technological world and its effect upon our society is developed. Safe practices in the use and care of materials, tools and equipment at home, school and at work are stressed. The program also assists in developing proficiency in a variety of mechanical skills. Problem-solving experiences are emphasized to help students become alert contributors and consumers and provide a means by which they can apply in meaningful situations--the principles of science, mathematics and other related subjects.

The program draws heavily on all types of supporting media. All laboratory areas and the planning room are equipped with various projection media enabling flexible use of the equipment. An industrial arts library is contained in the planning room, where all types of planning, instruction and testing occur throughout the school day.

Programs and classes are flexible to provide the best opportunities for the slow-learning groups and are also adaptable to the advanced student. Individualized instruction is employed as much as possible to meet the individual needs of the junior high school student.

Additional Information:
School district: Richland School District
County: Cambria
Grades: 7-9

Contact person: Thomas H. Swartz
Instructor, Industrial Arts
Richland School District
Theatre Drive
Johnstown, Pa. 15904

WORLD CULTURES

This course in world cultures attempts to give youth a better understanding of the major cultures and peoples throughout the contemporary world. The emphasis is on the present, but the present cannot be understood without references to the past. The knowledge of people's past history sheds light on understanding of their culture and their ways of thinking, feeling and believing. But to fully understand each cultural area, it is necessary to know about its geography; the status of its sciences, agriculture and industrial development; its self expression through art, music and literature; its family life and its social organization.

To gain this understanding, the 11th grade study of world cultures is based on individual research and class discussion. The year's study is divided into nine units--an orientation unit on the meaning and nature of culture and eight cultural areas of the world. Since no basic textbook is used, students are given a study guide from which they do individual research from 15 or more sources of information within the classroom and additional sources outside the classroom.

The formal class period is utilized in class discussion with students contributing a wide variety of information and many points of view. A part of each unit is devoted to auditioning records of its music, viewing and discussing artifacts, reading excerpts from its literature and viewing and discussing slides and filmstrips.

Appraisal of bulletin boards, travelogues and individual research projects are made and developed by the students in one method of evaluation.

Additional Information:
School district: Richland School District
County: Cambria
Grade: 11

Contact person: S. Elizabeth Green
Head of Social Studies Department
Richland School District
1446 Scalp Ave.
Johnstown, Pa. 15904

SPECIALIZED EDUCATIONAL SERVICES--TITLE I

The supplementary educational program made possible through ESEA Title I funds originated to meet the needs of the disadvantaged children attending school in the Ringgold School District. Early diagnosis and treatment of educational handicaps provide the most feasible approach to the elimination of those deficiencies that would hinder total educational development. Consequently, the program is concentrated on the elementary level, particularly the first three grades.

Several instructional and service activities are conducted under the general title, "specialized educational services." Some projects, by their nature, tend to benefit all students in a school whether or not they are educationally deprived. Examples of such projects conducted in the Ringgold School District are the elementary librarian, the library aides and classroom equipment purchased with federal funds. Other programs such as remedial reading and mathematics instruction, speech therapy, art, music, guidance and social services tend to benefit those who have specific educational needs.

The remedial reading program has priority and, therefore, the largest expenditure of ESEA Title I funds is in this category. Students reading below grade level are selected on the basis of standardized test scores and teacher recommendation. Three certified reading specialists provide individual and small group instruction utilizing reading laboratories in three of the elementary target schools. Individual tachistoscopes and controlled reading equipment enable the children to progress in proportion to their ability. This in the regular school year culminates in an extensive summer school program which enrolls 95 per cent of all the disadvantaged pupils. Reading and mathematics are emphasized in which pre and posttests are administered. Field trips and camps promote social mixture.

Additional Information:
School district: Ringgold School District
County: Washington
Grades: 1-6

Contact person: James Beadling
Federal Projects Coordinator
Castner School
Ringgold School District
Ninth street and McKean avenue
Donora, Pa. 15033

NEW PERSPECTIVES IN THE SOCIAL STUDIES
A CONCEPTUAL-INTERDISCIPLINARY APPROACH

This social studies program is built on "concepts" from the social sciences--anthropology, economics, geography, history, political science, sociology and the humanity of philosophy--with an "interdisciplinary" approach.

Generalizations were determined for each social science pertinent to the entire social studies curriculum. Units of study are structured for each grade level K-12 across five basic themes:

1. Man and his natural and cultural environment.
2. Responsible citizenship and governmental development.
3. Recognizing and understanding world interdependency.
4. Economic living.
5. Conflict and change.

The guide is predicated in the belief that the social studies curriculum must be grounded in the social sciences in order to make maximum contributions to the development of effective citizenship. Direct attention is given to ways in which concepts and main ideas in the social studies may be developed and identified in the social studies. Detailed investigation is given to modes of investigation, processes of thinking and the development of attitudes and skills which are essential to learning in the social studies. As students develop an understanding of the structure of the social sciences through the discovery of key concepts and generalizations and as they develop skill in using methods of inquiry and study, transfer of learning should be facilitated.

Additional Information:
School district: Rose Tree Media School District
County: Delaware
Grades: K-12
Pamphlet available upon request

Contact person: John R. Madden
Chairman, Social Studies Department
Rose Tree Media School District
412 N. Jackson St.
Media, Pa. 19063

OUTDOOR EDUCATION

Making conservation education a part of the existing school curriculum at all grade levels is the underlying purpose of this outdoor program. Initiated by the superintendent of schools, the Department of Forests and Waters, representatives of the Tyler Arboretum and administrators of several area schools, this program (1) developed experimental field-oriented curricular materials to enrich existing K-12 programs, (2) planned for the development of the Tyler Arboretum and Ridley Creek State Park as an "outdoor classroom," (3) developed a teacher training program emphasizing the use of the out-of-doors as a teaching resource, (4) pioneered the development of vocational horticulture training at the high school level, (5) initiated and expanded upon a comprehensive multifaceted curriculum development program designed to foster outdoor and ecological education as an integral facet of the total school curriculum, (6) established an extensive curriculum materials dissemination program in order to facilitate dissemination of pertinent curriculum materials to concerned educators at all levels of instruction and on a county, regional, state and national basis, (7) developed and instituted a student teacher training program, (8) organized and conducted a comprehensive learning resource center for outdoor education program designed to foster outdoor education experiences as an integral element of the educational program of secondary and college level students, (9) designed and initiated a satellite center program to encourage the use of school sites and adjacent areas as outdoor learning environments and (10) instituted an in-service training program for teachers to encourage the incorporation of outdoor learning activities into the regular instructional program.

The accomplishment of these objectives under a planning grant during the period June 1966 to February 1968 led to the present operational program. Curriculum workshops have developed over 200 field trips and follow-up activities for grades K-6. More than 41,000 students were served directly by our field instruction program during the past year, with more than 84,000 students and teachers having benefited directly from the program since its inception. A library, indoor laboratory, numerous field study sites, newsletter and comprehensive set of audio-visual aids have been developed to facilitate and implement the programs of the center. The center is served by a specially trained staff of professional outdoor environmental educators.

Additional Information:
School district: Rose Tree Media School District
County: Delaware
Grades: K-college, including graduate school

Contact person: Lawrence B. Stratton
Director, Southeastern Pennsylvania
Outdoor Education Center
Sycamore Mills Road
Media, Pa. 19063

CLASS FOR BRAIN INJURED CHILDREN

The program for brain injured children of average or above average intelligence was initiated after a scrutiny of a five-year program of "causes of underachieving" funded by Title I.

The focus is to provide an educational program for children who have associated learning problems due to some impairment in the brain. The program was developed by the supervisor of pupil services and by the supervisor of special education in conjunction with the learning disability specialist. It is based on methods proposed by Kephart, Cruikshank and Getman.

In teaching the neurologically impaired children, the academic material is integrated in a curriculum to meet their individual needs. Children are guided to acquire a sense of security, of adequacy, of belonging and the ability to face reality by recognizing their strengths and weaknesses, to fully develop their potentials and to compensate for those disabilities which they cannot overcome.

The teacher and aide avoid judging or criticizing. With understanding and patience they use techniques and procedures designed to be successful in developing behavioral controls and in developing the basic educational skills and learnings.

The aim of the program is to provide an educational setting adapted to the specific needs of a certain group of children who have previously been successful in school, and who, with this training, should be able to return to their home school and function successfully there.

Additional Information:
School district: Scranton City Schools
County: Lackawanna
Grades: Primary

Contact person: Tinnina C. Ross
Supervisor of Pupil Services
Scranton City Schools
425 N. Washington Ave.
Scranton, Pa. 18503

CLASSES FOR CHILDREN WITH LEARNING DISABILITIES IN ELEMENTARY SCHOOL

This program was developed and initiated as an outgrowth of the "causes of underachieving" which was begun at grade 3 and was expanded to include children of K-6 over a five-year period.

The five-year pilot study documented needs for special help for the children experiencing learning problems in spite of average and above average intelligence.

The program, located in a renovated school building, is designed to provide special training--especially in the visual-motor perceptual area--for young children with mild cerebral dysfunctioning. The children are enrolled in a daily part-time class, small in size and structured in content. Emphasis is on visual-motor perceptual training with the classrooms having minimal distractions. The children learn at their own rate. They are helped to achieve more self inner-control; and the transition to their own classroom on a full-time basis is coordinated when they are judged ready to return.

Psychological evaluation, psychiatric and neurological examination and numerous developmental screening tests are all used in addition to teacher recommendation and parental approval in assigning the child to this center. The learning specialist provides each student with an individual prescription to learning which is reviewed weekly.

In-service of teachers and aides was conducted daily for four weeks prior to the beginning of classes.

Materials used are numerous and varied including Frostig, Media, Teaching Resources, Kephart, Cruickshank, Getman and others.

Additional Information:
School district: Scranton City Schools
County: Lackawanna
Grades: K-6

Contact person: Tinnina C. Ross
Supervisor of Pupil Services
425 N. Washington Ave.
Scranton, Pa. 18503

HUMANITIES

In 1963 the state Department of Education urged this district to undertake a humanities pilot program. Faculty members agreed that such a program was needed to help offset the imbalance created by an overemphasis on science. The program was designed to broaden the cultural and aesthetic horizons of students, to give a headstart to students aiming toward college, to help all students toward profitable and appropriate use of leisure time and to aid them in distinguishing between trivial expression of man, in many media, and that of lasting, universal value.

The program exposes 11th and 12th grade students to cultural influences without the artificial limitations imposed by specific subject designations. It directs their attention to motion pictures, plays and television programs of merit and follows up with student discussion groups. Field trips are taken to museums, musical and dramatic special events and private homes which are architecturally noteworthy. Direct reading of literary works involving man's struggle toward nobility is stressed. Efforts are made by the staff to make the students aware of the value of certain aspects of art and music. Student independent study projects are assigned in areas of the arts and of thought not previously recognized by the school curriculum. Students are encouraged to use the libraries of nearby universities and to attend various cultural events held there. Occasionally, faculty members of these universities are guest lecturers to the humanities classes.

In September 1967 the project was expanded under auspices of Project SESAME, a program financed with federal funds, with operational headquarters at Bucknell University. In the three-year period since that time, resource materials have been greatly augmented with the building of record and slide collections and with the purchasing of audio-visual equipment. Field trips are made annually to Philadelphia and to Washington, D. C. to visit museums and cathedrals. Wider use has been made of outside resource persons.

Additional Information:
School district: Selinsgrove Area School District
County: Snyder
Grades: 11-12

Contact person: W. Michael Weader
Superintendent
Selinsgrove Area School District
Box 90
Selinsgrove, Pa. 17870

MOTIVATION RETRIEVAL PROGRAM
IN AN
INFORMAL OPEN SPACE ENVIRONMENT

Children who live continuously on a diet of failure both at home and at school very often lose all desire to learn. Although many of them score within the normal ranges in mental tests, they do not experience success in school work and relationships. The seemingly apparent causes, such as poverty and social deprivation, do not offer easy solutions since the real causes lie deeply buried in child nature and are unresponsive to the testing instruments now available.

These boys and girls are not eligible for admission to special education classes and often comprise a neglected fringe group who remain in the regular classrooms with an almost certain destiny of academic failure. Scattered among the elementary schools in this school district were some 33 such children and the administrators were unwilling to give up on them without a major rescue effort in their behalf. The objectives of the program are:

1. To restore in the children the natural and normal motivation to want to learn with which they were born and which was damaged in some ways by their life experiences.
2. To conduct a program which would assure each and every child a succession of successes, at whatever levels of activity deemed necessary and feasible.
3. To return the boys and girls eventually to the regular classrooms with some competence in basic skills and a wholesome desire to learn.
4. To disseminate the data and experiences of this program to the teachers in the Shamokin Area elementary schools, to professional journals and publications and to other individuals and groups upon request.

A two-classroom, open space, carpeted pod was provided and an informal climate of permissiveness and tolerance is maintained. The children have a schedule of activities tailored to their own needs and geared to their unique pace of learning. In only its first year of operation, the project shows great promise of achieving its goals.

Additional Information:
School district: Shamokin Area School District
County: Northumberland
Grades: Primary Ungraded

Contact persons: Paul A. Wehr
Federal Coordinator
Shamokin Area School District
Rock and Sunbury streets
Shamokin, Pa. 17872

MOTIVATION RETRIEVAL PROGRAM IN AN INFORMAL OPEN SPACE ENVIRONMENT (Cont'd.)

Contact persons: Royce O. Johnson
Bloomsburg State College
Bloomsburg, Pa. 17815

SCIENCE--A PROCESS APPROACH

"Science--a process approach" is not a textbook course--it is not "content" oriented. Even though a wide variety of science areas are explored, content is the vehicle or means--not the end. Because the program is process oriented, students can learn with a minimum of reading skills, which makes the program workable for prereaders and poor readers. The emphasis is always on active participation by each student as scientific investigations are considered. The process approach helps students learn to express themselves--to communicate. It heightens their observation skills. It allows them to feel success in the process of learning and discovering new information through personal learning experiences.

What about the scientific facts, laws and theories that comprise scientific knowledge? Actually, the details of scientific content in the process approach are as comprehensive as any elementary science education program. But, after the bits and pieces of information derived from content are forgotten, students exposed to the process approach will have developed and retained their skills in the processes of science. While the facts, laws and theories are always subject to review and revision, the basic tools of science do not change.

The process approach is always interesting and stimulating because it is a constant challenge to the students and to the teacher as well. Instead of instructing and explaining, the teacher presents each problem or assists in identifying a problem--provides directions and probes to guide them in solving each problem.

A key objective of "science--a process approach" is to teach certain processes--to develop specific competencies in these behaviors in children beginning at kindergarten level. In the program for the primary grades, the basic processes have been identified by these terms: observing, classifying, using space/time relationships, using numbers, measuring, communicating, predicting and inferring.

Exercises begin with the development of basic process skills (behaviors). Each exercise is designed to alter the student's behavior in specific ways which can be observed, measured and evaluated by the teacher. Throughout the process approach, there is a spiraling effect as advanced exercises reinforce and add to the skills used in earlier exercises.

Additional Information:
School district: Shamokin Area School District
County: Northumberland
Grades: K-6
Pamphlet available upon request

Contact person: Lyman Weaver, Jr.
Head Teacher
Shamokin Area School District
Sunbury Street
Shamokin, Pa. 17872

MODEL ROCKETRY IN INDUSTRIAL ARTS

This program was established to help the student:

1. Acquire knowledge about the fundamentals of model rocketry.
2. Learn to design, build and launch model rockets.
3. Develop an appreciation of the interrelatedness of educational subjects in the high school.
4. Become interested in the United States Space Program (NASA) and its contribution to our country.

The students involved in this extracurricular activity were from grades 9 through 12 in the academic, industrial arts, commercial, general and special education programs. The only prerequisite for participation in this activity was a sincere desire to learn about and work with model rockets.

Organized meetings were held once a week after school and rocket design lectures and construction periods were conducted every Saturday. Weather permitting, a rocket launch was set once a month. The general public and the parents of the students were invited to witness the intraclub flight competition. Club members were required to design, build and launch their own model rocket. They were also required to cooperate with other students in a group effort toward a specialized area of interest. An example of this would be: students interested in model rocketry and electronics who would collectively develop and build the electrical launching system, public address system and electronic rocket monitoring devices. Instructors in the areas of mathematics, industrial arts, speech and science were frequently consulted for expert advice on special problems.

This program grew from a small group of students to over 40 active participants. After witnessing a few of the rocket launchings, the community became so enthusiastic that a separate fund was established to help model rocketry at Sharon High School, at least 10 newspaper articles were published and two other schools were inspired to establish model rocketry programs. At the request of the Pennsylvania state supervisor of industrial arts, a workshop was presented by this writer on "Model Rocketry at Sharon High School" during the 1967 Pennsylvania Interscholastic Athletic Association convention in Lancaster, Pa.

All model rocketry information of a technical and nontechnical nature can be obtained from the many manufacturers of model rocket equipment and the National Association of Model Rocketry. NASA also provides an extensive bibliography of all available information on model rocketry, space exploration and NASA films.

MODEL ROCKETRY IN INDUSTRIAL ARTS (Cont'd.)

Additional Information:
School district: Sharon City Schools
County: Mercer
Grades: 9-12

Contact person: Raymond S. Lolla
443 Apartment D
S. River Road
Lafayette, Ind. 47906

MULTI-MEDIA RESPONSE LEARNING SYSTEM

Coordinator between the Shikellamy School District and Project SESAME, ESEA Title III, Bucknell University has resulted in unique multi-media student response system at the Shikellamy High School. The system consists of hardware in the form of a galaxy of projectors, tape recorders and other audio-visual equipment as well as a media materials production center. Key elements of the program are intense staff involvement and an EDEX configuration which seats 60 students; EDEX is a multi-media student response configuration which permits large group instruction without sacrificing individual student involvement.

Teacher in-service learning takes place during the regular school day as well as in the evenings and at other times when school is not in session. Teachers are responsible for selecting a variety of materials and sequencing them to maximize pupil learning of preselected important concepts.

Pieces of audio-visual equipment in the system are cued electronically to begin operation automatically. At each pupil's desk is a series of buttons which enables each of the 60 students to answer questions (asked by the program or by the teacher directly) on an individual basis by pressing the response button. In this system the teacher becomes the facilitator or director of learning; the teacher is provided with immediate feedback on each pupil's progress. The teacher also has a media control console which permits the presentation of a variety of instructional media. This careful development and systematic electronic technique permits the teacher to become a broad-seeing monitor and decision maker able to re-program continuously and reinforce immediately to enhance student learning. This is made possible by student responses appearing as individual scores as well as class percentage on the teacher response console.

Additional Information:
School district: Shikellamy School District
County: Northumberland
Grades: 10-12

Contact person: James Doty
High School Principal
Shikellamy School District
Sixth and Walnut streets
Sunbury, Pa. 17801

TITLE I REMEDIAL READING

A desire for a program to provide a new learning situation for our socially, economically and educationally deprived students was established through the use of federal funds.

The program is designed to enhance both educational and emotional growth. This concept is accomplished through the use of primary objectives of remedial reading--the development of auditory and visual discrimination, work recognition, comprehension, oral reading and study skills. The incorporate use of phonetic, sight and linguistic programs is the basis of the remedial approach.

Students are selected through teacher referral and school and health records. Each student is screened by the social worker, which involves one or more home visitations. Upon admittance, each student is given a series of diagnostic tests and placed in a remedial class. The regular classroom teachers cooperate by scheduling their classes in such a fashion that few, if any, content areas are missed while the students attend the special reading classes.

A committee composed of remedial teachers, the social worker, the reading supervisor, the ESEA coordinator, school nurses and the administrative staff serves to enhance the understanding of the problems which confront students and arrive at valid conclusions which will benefit their future progress.

The remedial teachers are also involved in an intensive and continual in-service program. The primary emphasis is the exchange of ideas among remedial reading teachers through class visitation and discussion at regular meetings. People in charge of programs in the surrounding areas are also invited to discuss their programs and ideas. Evaluation of materials and suggestions for new materials and programs is another valuable aspect of these meetings.

Augmenting the program is consultant aid from Bucknell University, including special reading seminars and conferences. The assignment of student teachers from the aforementioned university is one innovation which is expected to increase the instructional capacity in certain aspects of the program.

Additional Information:
School district: Shikellamy School District
County: Northumberland
Grades: 1-7

Contact person: Floyd W. Walters
ESEA Coordinator
Shikellamy School District
Walnut and Sixth streets
Sunbury, Pa. 17801

PERCEPTUAL-MOTOR DEVELOPMENT AND EYE TRAINING

The objective of this program is to assist students in K-3 in the development of the eye in perceptual and visual skills, by introducing a gross motor and eye training program to the end that students will increase their ability to read, comprehend and learn as evidenced by standardized tests.

This program was considered as a pilot project to see if the proposed objective was valid. Under the direction of the visual consultant, the following procedures were initiated: practice in general motor coordination, balance, form perception, eye and hand coordination, eye movement and visual memory (imagery). A day of in-service training was planned to acquaint K-3 classroom teachers with philosophy, procedures and technique. Since this is a developmental rather than a remedial program, all students K-3 are included in the program.

The Southmoreland project was not meant to be a substitute for the regular methods of teaching and reading. It was, rather, a means of helping the teacher discover whether children can "see" a page and its parts, a composite picture and its elements or one form in relation to another form. If they can both perceive and reproduce what they see, they have a readiness for reading that will serve them well.

It is believed this program will eventually reduce the need for costly remedial instruction because emphasis is upon preventing difficulty rather than treating or correcting symptoms.

Additional Information:
School district: Southmoreland School District
County: Westmoreland
Grades: K-3
Pamphlet available upon request

Contact person: Daniel Kauffman
Coordinator of Federal Programs
Southmoreland School District
Administration Building
Scottdale, Pa. 15683

A TITLE I SUMMER READING AND MATHEMATICS PROGRAM

This program is designed to enrich the educational development of youngsters from low-income families. It encompasses grades 1-6 with 72 students taking part who are both academically and socially unable to meet everyday classroom situations. Transportation is provided to and from school.

Problems are dealt with through specialized enrichment approaches and remedial techniques. Since the culturally deprived students' problems are often associated with social and emotional difficulties, a guidance counselor assists with the program.

A group of seven elementary teachers teach. One teacher, during the school year and summer program with the guidance counselor, serves as a liaison between the classroom work and the student's parents, with the objective of making the ties between the school and home more closely knit and of seeking the parents' cooperation and understanding of their child's difficulties. All parents are scheduled to visit the program.

Present reading material, along with audio-visual devices, are used. The entire program is a cooperative enterprise involving all personnel in a team approach. In order to make the pupils aware of their shortcomings, a television camera and videotape unit are used to show them how they read and sound and also to study facial expressions. This proves to be a strong motivating device. Short plays and talks are taped and evaluated by the students. A sound slide presentation produced by the staff is also used.

There is one week of in-service and one week of evaluation for all staff members, with some parents being involved. Two aides assist in varied tasks.

The evaluation revealed that most students showed growth between the time pre and posttests are given. Individual record sheets along with recommendations to the teacher are placed in the pupil's record in order to assist the regular classroom teacher.

A half-time home and school visitor is working only with those families that qualify under Title I regulations who have pupils in grades 1-6. This person was trained by the Montgomery County Opportunity Board and continues to work closely with the abovementioned board.

After working with these families during the course of the year, the home and school visitor will be relied upon to change some attitudes towards school. Those families that need help will be referred to the proper agency.

In late March, the home and school visitor provides a list of those pupils that should attend the Title I summer school this summer.

A TITLE I SUMMER READING AND MEATHEMATICS PROGRAM (Cont'd.)

Additional Information:
School district: Spring-Ford Area School District
County: Montgomery
Grades: 1-6

Contact person: Steve J. Catranis
Elementary Supervisor
Fifth Avenue and Washington Street
Royersford, Pa. 19468

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COOPERATIVE WORK EXPERIENCE IN DIVERSIFIED OCCUPATIONS

Students not planning postsecondary education and not enrolled in a vocational program were receiving little, if any, instruction in occupational training in this district. The program was initiated in an effort to assist nonacademic students to make the transition from school into the world of work.

Combining in-school instruction and daily on-the-job training with a cooperating employer, the program aims to teach the students a marketable skill and to encourage attitudes and habits which will meet acceptable employment standards. Other broad objectives are to develop in the students understandings and attitudes about life in areas beyond their field of employment, to increase their understanding of the value of education in their day-to-day life and to promote a closer relationship between business and industry and the schools.

In preparation for the program faculty members studied local employment needs and visited a similar program in Maryland. Resource personnel were called upon from the nearby university.

Among the measurable results are the high number of students remaining in the same occupational area in which they had received their training, absence rate while in the program improved over that in the previous year, overall grades in school increased over the previous year, attitudes toward school improved and several potential dropouts remained in school to graduate.

Additional Information:
School district: State College Area Schools
County: Centre
Grades: 11-12
Pamphlet available upon request

Contact person: Donald S. Cross
Coordinator, Occupational Education
State College Area Schools
131 W. Nittany Ave.
State College, Pa. 16801

DATA PROCESSING I AND II

In response to a local, state and national need for people trained in data processing, the school district instituted two courses. Data processing I provides students understanding and experience in systems fundamentals, machine indoctrination, essential operations, specialized techniques allied with integrated data processing and data processing applications for accounting systems. Data processing II provides students understanding, experience and advanced training in punched card data processing principles and operation of a 1130 computer system as well as an introduction to programming this system.

The coordinator of business and data processing education set up a program which was supported by a lay advisory committee and approved by administration and school board.

Research which established the need included surveys of pupil interests and needs; professional study and survey of employment area; employment demands, trends and opportunities; view of industry, business leaders, labor and education.

Knowledge of integrated data processing and reports needed by management is a principle aim of the program, along with understanding in flow charting, forms design, methods of coding and condensing information, punched card design. The program attempts to acquaint students with some types of office jobs which lend themselves to automation. Understanding is sought of the two types of systems used in automated data processing--the tabulating system and the electronic-computer system.

In addition the program aims to provide experience on various types of data processing equipment. Besides classroom instruction, each student will have a minimum of 10 laboratory hours on four basic types of equipment. Finally, the course provides the basic information needed by students who wish to take advanced training in the field.

Additional Information:
School district: State College Area School District
County: Centre
Grades: 11-12 and adult
Pamphlet available upon request

Contact person: John F. Hanna
Coordinator, Business and Data
Processing Education
State College Area School District
State College, Pa. 16801

MUSIC

The chief purpose of the course of study is to find musical experiences suited to the needs of each student. The program is comprehensive, offering wide variety of experiences at all grade levels. The school hopes that listening to and performing good music leads to better understandings among peoples of all nationalities.

Thorough treatment of fundamentals is sought in the elementary grades. The elementary program is more structured than before, designed to enable the regular classroom teacher to take a more active part in teaching music without restricting the music specialist. In the junior high school, the scope of subject area has been expanded, with far more requirements in the fundamentals in the instrumental field. Included in the high school course are more music, history, harmony, dictation, conducting and analysis.

Committees worked on each grade area of the curriculum to set the emphasis and content of each course. The entire music staff was divided into committees to work with a coordinator of music. Clinics and demonstrations have been put on by people outside the system as well as within.

Highly rated by evaluators, the music program has brought noticeable results among the students. The school feels they learn more, sooner and more easily, that they have a grasp of all facets of music are in greater numbers studying music as a career and are taking part in more singing and playing groups in community and college.

Additional Information:
School district: State College Area School District
County: Centre
Grades: 1-12
Pamphlet available upon request

Contact person: Franklin B. Hege
Coordinator of Music
State College Area School District
131 W. Nittany Ave.
State College, Pa. 16801

AN ENVIRONMENTAL LEARNING CENTER

The Pocono Creek outdoor learning laboratory is a six-acre plot owned by the Stroudsburg Area School District. The center adjoins the junior-senior high school and is within walking distance of over 2,500 elementary, junior and senior high school students. The remaining 1,000 students of the district are within 15 minutes travel time.

This area has been established as a place where students of the district can learn those skills, appreciations and understandings that can be best learned in the out-of-doors. These activities should be coordinated with and compliment indoor activities. To date, its primary contribution has been in the natural sciences, more specifically in the field of conservation education. The objective is to provide those experiences which will help students develop an appreciation of nature and an understanding of the reliance each part of our environment shares with one another. A far reaching goal, simply stated, is to help boys and girls develop into citizens who will wisely and responsibly use the resources at their disposal. Some of these are expendable, others are replenishable. Air and water pollution are to be considered and not to be forgotten is the broad area of human resources.

An ever increasing emphasis is being placed on implementing the curriculum objectives of all subject matter areas through first-hand experiences. It is further strongly advocated that each subject will be utilized to solve problems students find in daily living. Outdoor education is multi-disciplinary in nature. Its resources may be used by all disciplines, although it is logical to assume that the potential for some is greater than for others.

As plans are being approved for a middle school our thoughts are concentrating on approximately 30 acres which will not be required for the new school plant. This varied area is drained by a brook that meanders through forestland and several overgrown fields. There are three buildings on the edge of the property. One, an old farmhouse, would make an excellent dormitory. Two adjacent barns could house an interpretative center and lecture area.

Through the use of the outdoor learning center, the value of outdoor education is becoming more and more apparent. Two elementary schools are now engaged in school camping. This resident program culminates a year-long study in conservation.

Additional Information:
School district: Stroudsburg Area School District
County: Monroe
Grades: K-12

Contact person: Ralph Knauf
Principal
Clearfield School
Stroudsburg Area School District
2000 N. Fifth St.
Stroudsburg, Pa. 18360

MOBILE READING LABORATORY

This is a very atypical situation involving eight rural schools, dispersed over an area of 273 square miles. Financial cost prohibited the purchase of equipment for each building. As an alternative, the mobile program was established to solve reading problems that were not being corrected in the normal classroom grouping. Smaller groups were created and concentrated work with special reading equipment was implemented. Students for the program were selected according to their reading needs and socioeconomic backgrounds.

Motivational devices and reading materials are employed to place the student at the proper grade level. To develop and improve visual ability, the tachistoscope and flash-xes are utilized. Reading speed is increased through the use of controlled reading machines; records and tapes provide listening experiences. Phonetic ability, critical thinking, vocabulary development and comprehension are heightened through the use of phonic word games, the Webster reading laboratory and SRA reading materials. Specific skills in the areas of science, social studies and research are developed in educational development laboratories and the study skills library. Enriched reading experiences outside of the classroom are created by a hi-low library. All methods and objectives of the program are designed to maintain the continuation of desired reading skills of children in a classroom situation.

Evaluation shows a desirable change in student attitudes and reading interests. Some students have made considerable progress and are reading at or above their normal level.

Additional Information:
School district: Troy Area School District
County: Bradford
Grades: 2-9

Contact person: A. Eugene Case
Assistant Superintendent
Troy Area School District
Box 67
Troy, Pa. 16947

VOCATIONAL AGRICULTURE

This comprehensive vocational-agricultural program was instituted because this school district became seriously aware of its students' lack of basic agricultural knowledge and mechanical abilities. Two additional factors prompted the program--a large number of graduates of this district going into agricultural work and comprehensive surveys done in cooperation with Pennsylvania State University Agricultural Education Department which indicated many agricultural related jobs available in the area of this district.

The program is a broad-based one involving grades 9-12, designed to develop skills, provide work experiences and to foster appreciative attitudes toward agriculture and its service to the community. A graduated shop program based on development of mechanical skills and leading toward individual projects is a vital part of this program. A school farm laboratory contains both the latest in modern farm equipment and the older time-tested machinery. Experimentation with new innovations in livestock and crop sciences is thus provided along with learning about present day practices.

Units and practicum in "park maintenance and development" are designed in cooperation with the township park and recreation board. Approximately 70 acres of land are available for this program.

Units in agricultural business, exploring the use of data processing-computer usage in farm management and agricultural business have helped to bring our total vocational program into the "computer age."

Accepted as a student-teacher training center in 1970 for Pennsylvania State University-Agriculture Education Department.

FFA activities are closely integrated in all stages of this program to make use of its character-building aspects.

Planning this program involves the continuous use of parent and citizens committees. A great deal of additional community help was utilized in developing this program and its facilities. The cooperation of Pennsylvania State University and the agriculture education division of the Department of Education has been valuable.

Additional Information:
School district: Union Area School District
County: Lawrence
Grades: 9-12

Contact person: David D. Seamans or Edward L. Martsolf
Union Area School District
2106 Camden Ave.
New Castle, Pa. 16101

BASIC EDUCATION AND WORK STUDY

Classes for students who are limited in their learning capacity have school programs adapted to their needs and abilities. Classes for educable retarded students begin at the primary level and progress through the senior high school. Placement in this program is made upon recommendation by the school psychologist after a serious learning difficulty has been adequately diagnosed. This may occur at any stage of the student's school career, but most frequently occurs at age 7 for elementary classes, age 13 for junior high school classes and at age 16 for the senior high school programs.

The aim of education for those with limited learning abilities is the same as that for all students. The emphasis in teaching is upon personality development, mental and physical health, the acquisition of social skills and the direct teaching of occupational skills to further desirable work habits and attitudes. Tool and academic subjects are taught with practical and daily application to life.

The Fernwood training center is for students who are able to adapt socially to living in a group but who cannot be taught the skills necessary to prepare them to be self-supporting in adult life.

In the four classes in the elementary schools, students advance from one class to the next, not upon academic achievement so much as through social maturity. The junior high school basic education classes are taught as self-contained groups. Integration with regular classes is encouraged.

At the senior high school level, the "work study" course introduces nonacademic students to the "world of work." This educational program is adapted to the needs and capacities of the students.

Additional Information:
School district: Upper Darby Township School District
County: Delaware
Grades: Special Education (ages 6-18)
Pamphlet available upon request

Contact person: Blanche C. Vetre
Coordinator of Special Education
Upper Darby Township School District
Lansdowne Avenue and School Lane
Upper Darby, Pa. 19084

GENERAL MUSIC OR MUSIC FOR EVERY CHILD

Because the music faculty in a junior high school felt that a course based entirely on singing was not challenging every student, was creating discipline problems and was failing to interest the untalented pupils, a course in creative listening was evolved to supplement the singing program. This has led to the development of a comprehensive course in cultural enrichment based on, but not limited entirely to music. The teachers recognized that the singing voice, particularly in boys, is at a disadvantage in the junior high years and that a program based wholly on singing fell short of the desire to increase musical literacy in the school population.

In an effort to develop discriminative listeners to music, the program is aimed to encourage active participation and creativity on the part of the listener. It attempts to familiarize the students with some of the mechanics of listening and performing. There is emphasis placed on the development of good vocal habits and continuous attention placed on understanding the music page. The course also attempts correlation with related subject matter and provides opportunities for those students who develop a particular musical interest, to further this interest in depth.

In addition to listening to a wide variety of music, the students write compositions describing with words what the music describes in sounds. Some analysis of the music is done through charts and diagrams. There is correlation with social studies, English, hygiene, science and art. Enrichment activities also include use of the library, attendance at professional performances and assignments in reviewing selected programs on TV or radio. Class instruction in piano for beginners is being offered on an exploratory basis.

Additional Information:
School district: Upper Darby Township School District
County: Delaware
Grades: 7-9

Contact person: Mrs. Catherine Ziegler
Chairman, Music Department
Upper Darby School District
Lansdowne Avenue and School Lane
Upper Darby, Pa. 19084

ADVANCED CHEMISTRY

This course was introduced as an elective for seniors who have completed the basic science offerings: a biology course (BSCS: green version), a chemistry course (chem study) and a physics course (PSSC). Alternate electives are astronomy and advanced biology. Several students with a keen interest in a science-oriented career are taking two advanced science courses concurrently.

Students explore in greater depth the fundamental principles of chemistry already introduced by the chem study course. Some concepts are presented in formal lectures which enable students to develop experience in note-taking. Library selections in chemistry have been expanded in scope particularly through paperbacks which offer supplementary readings in specific topics. Seminar type presentations and discussions help students gain deeper insights. Stress is placed upon the development of skill in those chemical calculations most frequently encountered in a first-year college course. Quantitative chemistry experiments are correlated with the problem-solving sessions.

Upon completion of the course, students may elect to take the advanced placement examination in chemistry and thus might be able to receive some credit toward the basic chemistry requirement at the college of their choice. Therefore, one important result of offering such a course at the high school level is the possibility of acceleration of students' science programs at the college level.

Additional Information:
School district: Upper Moreland Township School District
County: Montgomery
Grade: 12
Pamphlet available upon request

Contact person: Patricia D. Eckfeldt
Science Department Chairman
Upper Moreland Township School District
Terwood Road
Willow Grove, Pa. 19090

ASTRONOMY

When the new wing was added to the senior high school in 1963, an observatory was included. The 16-foot observatory dome houses a 12" Cassegrain reflector-type telescope equipped with cameras for astrophotography. There is an adjacent roof deck approximately 32 feet by 10 feet where six portable telescopes are used. An adjacent darkroom is available.

This course may be elected by juniors or seniors who have completed the following basic science offerings: a biology course (BSCS: green version), a chemistry course (chem study) and a physics course (PSSC). Course content includes seminar-type presentations of fundamental principles of astronomy with stress placed upon mathematical interpretations. The telescope is used as a research instrument for individual research projects. This year a group engineering project, directed toward a better understanding of space science, is being developed.

Since the course is closely correlated with the physics course, students planning to take the advanced placement examination in physics increase their background of information by electing astronomy. The course also includes principles and laboratory experiences which are of a caliber that should enable students to accelerate their program should they elect astronomy at the college level.

Additional Information:
School district: Upper Moreland Township School District
County: Montgomery
Grades: 11-12
Pamphlet available upon request

Contact person: Patricia D. Eckfeldt
Science Department Chairman
Upper Moreland Township School District
Terwood Road
Willow Grove, Pa. 19090

COMMUNICATIONS MEDIA

An innovative course offering has been established in the Upper Moreland School District to provide students with enrichment experience in the area of instructional media.

Students in grades 5-12 are involved in six weeks of classroom instruction and laboratory work, culminating in the production of an original dramatization which calls upon all the talent and technique developed earlier in the course. Working with their district equipment, students develop abilities in the design and construction of graphics for classroom use; the production of high quality audio programs and the use of sophisticated sound equipment taught as well. Use of still and motion picture equipment is a very exciting part of the program, allowing youngsters to combine skill and creativity.

In the final weeks of the program, students work with instructional television equipment, calling on their own resources and the techniques they have developed in comparable areas. As a giant production team they design sets and costumes, prepare makeup and artwork, tape, edit and score their own educational production. One of their more recent efforts, "Portrait of A Lady," chronicled the lives of the first governor of Pennsylvania and was shot entirely on location on the former executive's estate in Horsham, Pa.

This course provides students with an opportunity to use abilities and talents which may not be tapped by standard classroom activities.

Additional Information:
School district: Upper Moreland Township School District
County: Montgomery
Grades: 5-12
Pamphlet available upon request

Contact person: Robert J. Clark Jr.
Director of Instruction Media
Upper Moreland Township School District
Administration Building, Terwood Road
Willow Grove, Pa. 19090

INTRODUCTION TO ECOLOGY

This course is designed for any student who enjoys the outdoors and is interested in learning more about interrelationships which exist in natural habitats. This summer enrichment program is offered during the two weeks immediately following the close of the regular school term. Basic principles of ecology are developed through classroom discussion based on related filmstrips and assigned readings from Basic Ecology by Ralph Buchsbaum. Field trips coordinated closely with the work of the classroom introduce students to natural areas in the Philadelphia region.

During the first week, a concentrated investigation of the local biome is embarked upon and students are introduced to methods of investigation and identification in field biology. A woodland adjacent to the school and the Morris Arboretum of the University of Pennsylvania serve as excellent outdoor laboratories for this part of the course. The second week offers a comparative study of a variety of biomes with related field trips: a seashore--Island Beach State Park, the pine barrens--Batsto Nature Area and vegetation of desert and tropical rain forest--Longwood Gardens.

Having been introduced to some of the basic principles of ecology through this short introductory course, it is hoped that during the summer vacation students will return to these and other natural areas to continue their investigations in greater depth. Through such study greater appreciation for the preservation of natural areas and general concern for conservation of our natural resources are developed.

Additional Information:
School district: Upper Moreland Township School District
County: Montgomery
Grades: 7-12
Pamphlet available upon request

Contact person: Patricia D. Eckfeldt
Science Department Chairman
Upper Moreland Township School District
Terwood Road
Willow Grove, Pa. 19090

THE ROLE OF THE COMPOSITION PROGRAM

In the past decade there has been a growing recognition of the high school student's need for training in critical reading, critical thinking and critical writing; therefore, the Department of English of Upper Moreland Senior High School has endeavored to build its composition program around these three needs.

For the past seven years, the students and English teachers have been engaged in an intensive writing program. As a result of this plan the school literary magazine Focus has come into being. This publication brings together five departments of the school: English, art, business, foreign languages and printing. Each student is given a free copy of the magazine in English class. Teachers are encouraged to use the magazine as a teaching aid.

As a student writes his weekly composition, he knows that he has a chance of seeing his work in Focus. Each teacher and each lay reader have been instructed to search for Focus entries. These entries must be corrected by the student, typed without name of student or teacher and placed in the entry box of Focus, for consideration by the staff. The enclosed samples show various types of composition assignments. All ability levels in grades 9-12 are included in this project.

A worthwhile composition program demands time, effort, organization and supervision, but the rewards can be gratifying for students and teachers. Results at Upper Moreland show success of graduates in a number of advanced composition courses on the college level, increases enthusiasm on the part of many students for writing and keen satisfaction for the English teachers.

Additional Information:
School district: Upper Moreland Township School District
County: Montgomery
Grades: 9-12

Contact person: Ruth Helwig
English Chairman
Upper Moreland Township School District
426 Silver Ave.
Willow Grove, Pa. 19090

TWELFTH GRADE HONORS COURSES IN MATHEMATICS

A course in analytic geometry and calculus is offered as a major subject to students of the 12th grade who have demonstrated superior achievement in prerequisite mathematics courses. It is scheduled in addition to a full-credit honors course in analysis and trigonometry.

Thus, capable students are given an opportunity to intensify their preparation for a future in mathematics, science, engineering or related fields without infringing upon their mathematics courses of the 9th, 10th and 11th grades.

Students are selected for the course by staff recommendations which are based on past performance, intellectual maturity, study habits, retentive ability, attitude and motivation.

Follow-up studies indicate that students who have completed the course are performing very satisfactorily on college and university programs and several of them have received advance placement.

Additional Information:
School district: Upper Moreland Township School District
County: Montgomery
Grades: 12
Pamphlet available upon request

Contact person: Emma Jane Fish
Chairman of the mathematics department
Upper Moreland Township School District
Terwood Road
Willow Grove, Pa. 19090

WORK EXPERIENCE PROGRAM

A complete work experience program has been inaugurated in Upper Moreland Senior High School for the special education class.

Of the 14 students attending the class, all attend school in the morning for instruction in their academic subjects. At 11 a.m. nine students travel to Goodwill Industries in Glenside, Pa., by bus for a training program provided by the Bureau of Vocational Rehabilitation in conjunction with the Upper Moreland School Board. These students receive training in shoe repairing, repairing of small appliances, sewing, dry cleaning and pressing, wood shop and retail store clerking. Two students from the class are attending the Eastern Area Montgomery County Vocational-Technical School in Willow Grove and are enrolled in the horticulture department of the school. The remaining four students are in an industrial training program and gainfully employed each day from 11 a.m. until 2 p.m., Monday through Friday--one being employed at Downs Carpet Company, Turnpike Road, Willow Grove; one at Interstate United, the cafeteria concession for Philco-Ford, Willow Grove Industrial Park; one at Elco Corporation, Fort Washington Industrial Park and one at Winston Industries, Willow Grove. These students are taken to their respective training jobs in the Upper Moreland School District station wagon each day and returned to the school in time to board their bus for home.

Each of these training jobs will result in permanent employment for the students upon completion of their required high school courses of study.

The Upper Moreland School District is very appreciative of the firms who are participating in this most worthwhile work experience program.

Additional Information:
School district: Upper Moreland Township School District
County: Montgomery
Grades: 9-12
Pamphlet available upon request

Contact person: Robert A. Miller
Curriculum Chairman
Upper Moreland Township School District
2050 Geoffrey Drive
Willow Grove, Pa. 19090

EDUCATION EQUALIZATION IN PHYSICAL EDUCATION

Combined school and home prescribed activities constitute a specialized adapted physical education program for the physically handicapped and for pupils with significant postural abnormalities and muscular deficiencies.

The K-12 student body is screened by nurses and physical education teachers to identify probable cases. Referrals are received from family physicians, classroom teachers and parents. This tentative group is again screened by a physical therapist, the adapted physical education director and school physicians. Most serious cases are reviewed by the orthopedic physician. Through these procedures a group of 80 to 100 pupils are selected for the program, approximately 3.5 per cent of the total student body.

The physicians prescribe the corrective set of exercises for each pupil. A full-time adapted physical education supervisor works with these pupils in groups of six to eight, twice a week. A specially prepared brochure of illustrated exercises is presented to parents. A meeting of the parents and the students is held to instruct in proper techniques. Students are urged and motivated to follow daily their corrective exercise programs 365 days a year. The physical therapist visits the homes to assist parents and students in proper procedure and to motivate consistent practice. In class sessions the director evaluates progress, corrects techniques, encourages full daily participation and schedules retesting by the physician and therapist for adjustment of prescription or eventual graduation. "Before and after" posture photos are used in evaluation of each case. An adapted physical education specialist from the staff of a nearby college periodically reviews the progress of the program and recommends desirable adjustments.

Public evening demonstrations, talks to civic groups, work of a citizens' advisory council and use of newspaper, radio and television media have gained citizen acceptance and support.

The objective of the program is eventually to graduate a class of strong, healthy, attractive young Americans each year who will retain these goals of excellent physical condition throughout life.

Additional Information:
School district: Upper Perkiomen Township School District
County: Montgomery
Grades: K-12

Contact person: Donald C. Thompson
Superintendent
Upper Perkiomen Township School District
1 Walt Road
Upper Perkiomen, Pa. 18073

BSCS BIOLOGY PROGRAM

The BSCS biology program was adopted by the district in an effort to upgrade the quality of science education on the high school level. It was felt that the BSCS program would provide biology students with a more modern approach to the biological sciences and as a result they would be better qualified to understand and cope with the demands of college level instruction. It is also apparent that the biology of today requires an understanding of the molecular nature of living things in addition to a more descriptive consideration.

Necessarily then, the approach must be laboratory oriented. Chief laboratory emphasis includes a detailed study of cells, the chemistry of the cell (both plant and animal), the anatomy and physiology of the systems of the body and the genetics of man and the fruit fly. The "yellow" version of the BSCS program was selected since it suited better individual student needs. This version emphasizes the cellular approach to modern biology.

Students in the 10th and 11th grades may elect biology which meets six periods a week. Two of these periods are consecutive, thereby providing adequate time for laboratory work. In general the average and above average student has little difficulty responding to the intellectual demands of the course.

Additional Information:
School district: Wallingford Swarthmore School District
County: Delaware
Grades: 10-11
Pamphlet available upon request

Contact person: Elizabeth J. Davison
Biology Teacher
Wallingford Swarthmore School District
914 South Avenue, H-14
Secane, Pa. 19081

EDUCATIONAL MATERIALS CENTER

There has been a central library in Swarthmore Elementary School since September 1963. In 1966 an addition was built to the school which included a reading room with stacks, librarian's office, work room and a curriculum materials preparation room. In 1967 with funds provided by the Home and School Association, a listening center was added consisting of a phonograph, rear view film strip projector, tape recorder, 8mm loop rear view screen projector, eight sets of earphones and an amplifier. Software for use with these machines has been purchased with federal, local and special gift funds. Students have free access to the library at all times and make independent use of all the machines as well as the books, periodicals, prints, realia, transparencies and other materials in the center. Future plans include materials for a science resource center and development of a slide collection to be coordinated with the fine arts program.

Additional Information:
School district: Wallingford Swarthmore School District
County: Delaware
Grades: K-6

Contact person: Merrie C. Cohen
Elementary Librarian
Swarthmore Elementary School
Rutgers Avenue
Swarthmore, Pa. 19081

RELIGIOUS LITERATURE OF THE WEST

Religious literature of the west emphasizes the study of religious literature of the west from a literary rather than religious and historical point of view.

In September 1966, the Department of Education contracted with Pennsylvania State University to assist with the development of both student and instructors' manuals. Nationally known scholars in the field of religious studies were consulted and an advisory board composed of representatives from other colleges and universities reviewed the materials to be included in the course.

The student manuals contain selections from classical writings of the three major religions: Judaism, Christianity and Islam. Reading clues and commentary provide guidelines for study. Units are designed to promote interest in both the historical and literary aspects of the writings. The teacher is free to digress from the manual at any point. Emphasis is upon oral work, discussion, panels, oral reports, debates and a variety of classroom activities involving music and art have been introduced. In several schools the manual is used as a part of a senior English course. Related secular literature is included in these programs and students are encouraged to recognize allusions to Biblical characters, situations and philosophy.

In addition to the course in religious literature of the west, Swarthmore-Rutledge School District is participating in the field testing of a program of eastern religion which is being developed through the Department of Religion of the University of Pennsylvania.

Additional Information:
School district: Wallingford Swarthmore School District
County: Delaware
Grade: 12

Contact person: David T. Chestnut
Coordinator, Division of Languages
Department of Education
Box 911
Harrisburg, Pa. 17126

Lois Rothenheber
Consultant and Coordinator
Department of Religion
University of Pennsylvania
Philadelphia, Pa. 19129

TUTORIAL PROGRAM IN READING

This tutorial program was initiated primarily to provide intense individualized attention to those students who were demonstrably lacking in reading and spelling skills. As one of the facets of Project SESAME, ESEA Title III, the program is supervised by William Heiner of the Department of Education at Bucknell University. The tutors, juniors from Bucknell University specializing in elementary education, spend four afternoons a week for 10 weeks at two elementary schools in the district. One-half hour is spent with each elementary student in a one-to-one relationship. The tutor attempts to help the student in those areas in which he or she is particularly weak, such as phonetic analysis, speed and efficiency in reading and organization of materials for improving comprehension.

This tutorial instruction is given to approximately forty 4th and 5th grade pupils, predominantly from homes in rural or small town settings. Lack of available space in the buildings does not serve as a barrier to the program. Tutors and students can be found in the halls, in small empty corners and sometimes even in the boiler rooms. The cost of this program is minimal, since transportation to and from the schools for the college students is the only cost involved.

For the past three years, the Department of Education at Bucknell University has included an experience in tutoring as part of regular sequence of work in teacher preparation. Those students who are preparing to teach in elementary schools work with students who need assistance in reading. The tutoring assignment for these students occurs during the spring semester as part of the education practicum, the final course before student teaching. Therefore, in addition to giving the Warrior Run pupils a much needed opportunity for individual attention, the program provides an excellent opportunity for college students to work directly with young students under expert supervision.

Additional Information:
School district: Warrior Run School District
County: Northumberland
Grades: 3-5

Contact person: William Heiner
Assistant Professor
Bucknell University
Lewisburg, Pa. 17837

HUMANITIES

The program was established to answer the increased interest in a humanities course to benefit college-bound students who could profit from such an interrelated study in subject areas not normally presented at the high school level. The program was first initiated as part of a pilot program being explored throughout the state. Interested teachers attended workshops and planning groups involving other high school teachers and Pennsylvania college professors. The course is elective for one semester to those students who have a general average of "B" or better.

Using the theme, "The Building of the Human City," the humanities course explores certain social, political, philosophical, religious, literary and artistic expressions of man during several notable periods of history. These periods include 5th century Greece, Italian and English renaissance, the 19th century and limited areas of the 20th century. Bridging these main areas are brief investigations of the late Gothic, Baroque and Rococo periods. The students are guided in correlating and evaluating man's development through these periods to help them understand a culture not only in the economics and material side but also in the spiritual, intellectual and aesthetic aspects. Students keep a daily journal for comment and constructive criticism by the teachers.

Continuous self-evaluation by the students and teachers results in the updating of the curriculum, eliminating ineffective or inappropriate course content and substituting other materials and methods.

Additional Information:
School district: West Shore Area School District
County: Cumberland
Grade: 12

Contact person: Terrence V. Palmer Jr.
English Teacher
Cedar Cliff High School
West Shore Area School District
Carlisle and Warwick roads
Camp Hill, Pa. 17011

INDUSTRIAL ARTS--ELECTRICITY/ELECTRONICS

As an integral part of general education, electricity/electronics is offered to students on major, general and elective levels of study. This program was initiated to meet the responsibility the school has to give its students a well-rounded education. Whether a student continues in the field or not, his education in electricity/electronics fits the educational requirements of the culture of our times.

All levels stress the fundamentals of electricity/electronics theory. Class time is divided between classroom and laboratory experiences. These experiences involve soldering, meter reading, circuit tracing, circuit construction, experimentation and mechanical drawing of circuits. Use of electronic equipment, component familiarization, electronic symbols and language, trouble shooting, repair of electronic devices, modern innovations, industrial applications and problem solving are experiences that are afforded the student in electronics.

Students work in teams of two at each laboratory position. Students are required to construct a project of their choice, according to their level of achievement, available time and cost.

Field trips to local industries are arranged. Men from industry are invited to the classroom to speak to the students and discuss topics of study. Films and teaching aids help to round out units of study. Related reading, book reports and oral reports are also required.

Additional Information:
School district: West Shore Area School District
County: Cumberland
Grades: 10-12

Contact person: Edward J. Rogowicz
Electronics teacher
Cedar Cliff High School
West Shore Area School District
Carlisle and Warwick roads
Camp Hill, Pa. 17011

LIGHTHOUSE SPEECH PROJECT

West Shore is one of 10 Pennsylvania school districts participating in a statewide ESEA Title III demonstration project in speech education.

As a lighthouse school, Cedar Cliff has the opportunity to demonstrate its speech program to visiting curriculum planners and coordinators during a three-year period.

The program includes general speaking, an elective course which emphasizes the fundamentals of effective speech. This is a prerequisite course for the two upper level studies--radio, television and discussion and theatre arts. The former includes debate, argumentation and analysis of mass media material; the latter promotes all phases of play production.

Cocurricular activities of the program include competitive drama, speech and debate in the Pennsylvania high school speech league; participation in speech contests sponsored by community groups; presentation of plays for children and community groups and youth forum civic events.

Additional Information:
School district: West Shore Area School District
County: Cumberland
Grades: 10-12

Contact person: Lillian M. Juditz
Director Speech and Drama
Cedar Cliff High School
West Shore Area School District
Carlisle and Warwick roads
Camp Hill, Pa. 17011

TWO-TRACK PROGRAM IN FRENCH

The two-track program in French in the West Shore School District resulted from the controversy concerning the two methods of teaching foreign languages. The two-track system offered an opportunity to evaluate the two methods and at the same time make it possible to place transfer students in classes for which they were prepared.

After preliminary meetings of French teachers of the district with the foreign language specialist, the program was initiated with Track I using the audio-lingual approach and Track II applying the functional skills--grammar combination approach. At present the program is operating as follows:

Track I
Grade 6--required of all students
Grade 7 and 8--elective - Level I
Grade 9--Level II
Grade 10--Level III
Grade 11--Level IV
Grade 12--Level V Seminars
Courses are offered 2, 3 or 5 times per week

Track II
Grade 8 and 9--French I
Grade 10--French II
Grade 11--French III
Grade 12--French IV

The entire program is aimed at meeting the individual child's needs by stressing the four language skills. Speaking and listening skills are developed by use of record players and tape recorders in the junior high schools and by fully equipped language laboratories at the high school level. Writing skill is developed by composition, using the opaque projector for analyzation of structure. Reading of contemporary literature, classics and history develops reading skill as well as an appreciation of French civilization and culture. Community resources are utilized, particularly the native-French element. All advanced classes are taught in French with a minimum of English used at the lower levels.

Additional Information:
School district: West Shore Area School District
County: Cumberland
Grades: 6-12

Contact person: Thelma L. Marks
Coordinator of Foreign Languages
Cedar Cliff High School
West Shore Area School District
Carlisle and Warwick roads
Camp Hill, Pa. 17011

PROGRAM FOR THE VISUALLY HANDICAPPED

A definite need for braille instruction for blind children in the school district was noted by school authorities. Moreover, the visually handicapped had been unable to participate in the regular classes of the schools. For many years these children were kept in separate rooms, one for elementary and one for secondary. All subjects were taught to them by one teacher.

With the introduction of braille instruction, the blind children have been accepted into the school program. Visually handicapped and blind attend regular classes, coming to a resource room when they need help from the resource teacher. In the resource room are braille writers, braille books, large print books for every subject and every grade, including dictionaries and encyclopedias. There are magnifiers, talking books, recorded textbooks, tape recorders, earphones, chalk, chalkboards, widelined paper and special pencils, reading stands, large print typewriters, relief maps, relief globe and special desks and lighting. If the students wish to remain in their neighbor school, rather than be transported to the school that houses the "resource room," they may do so and the itinerant teacher will provide them as much support as needed. Aiding the teacher is a group of students from the youth corps and reader service from the state department, when needed "reader" service is provided.

The broad purpose of the program is not only to integrate these handicapped students into the school life but to integrate them into the community life as well. The school is finding the students are able to attend regular classes and are being accepted by teachers and classmates alike. Visually handicapped are able to hear lectures and do class work because of special aids. With the integration of blind and visually handicapped into regular classrooms, students also have joined school programs of music, athletics, shop work, plays and computer education.

Additional Information:
School district: Wilkes-Barre City School District
County: Luzerne
Grades: K-12
Pamphlet available upon request

Contact person: R. Harold Saunders
Assistant to the Superintendent
Special Services
Wilkes-Barre City School District
730 S. Main St.
Wilkes-Barre, Pa. 18702

WORK-STUDY PROGRAM FOR SPECIAL EDUCATION STUDENTS

The retarded children do not have the skills to compete successfully in an academically oriented high school and, therefore, need a program that will prepare them for their rightful place in society.

The Wilkes-Barre schools have developed an occupationally related program for these "slow learners" who are usually two to three grades below grade level in academic achievement. The educational objectives are to develop the highest potential of social, personal, educational and occupational competencies of the individual. These are supported by a work training program which strives to increase the effectiveness of the students by helping them to acquire good work skills, attitudes and habits which will sustain them throughout their adult life.

While the 11th and 12th grades provide actual work experience, the 10th grade is designated as a "preoccupational" course which attempts to help the students develop the necessary occupational skills they will need for their work station. The academic skills are directly related to their job training. They now put to use the skills they have learned. They are taught general job related skills by the use of hand tools, wood machines, garmet sewing equipment, home mechanics, home management, typing and general shop work. The objectives at their level are to develop good work habits and to develop manipulative skills and other job related skills.

The actual work experience is given in the 11th and 12th grade. Job related courses are taught in the high school setting by certified special education teachers and, on the job, the student is supervised by the coordinator of the work experience program. The coordinator is responsible for evaluating and placing the student at a suitable job station. The coordinator works closely with the employer, student and parent to be certain that the student has a satisfactory and worthwhile job experience.

The special education students are given all services (health, guidance, psychological, social case work) and have all the privileges and opportunities as that of the regular academic students. They may participage in safe driving, sports and other extracurricular activities. They participate in all graduation programs and receive a diploma at the regular graduation exercise.

The program has been successful in graduating 120 students to date. Over 75 per cent of these students continue in the type of employment for which they were trained.

Additional Information:
School district: Wilkes-Barre City School District
County: Luzerne
Grades: 10-12

Contact person: R. Harold Saunders
Assistant to the Superintendent in charge of Special Education
Wilkes-Barre City School District
730 S. Main St.
Wilkes-Barre, Pa. 18702

COMPREHENSIVE ART PROGRAM

The school district involved in this program had no prescribed comprehensive art curriculum. Assignments of art teaching staff were particularly kindergarten, primary, junior high school and the talented intermediate and junior high school students.

A comprehensive art program was designed and implemented. The program aims at developing individual expression, encouraging appreciation of basic aesthetics common to the arts, improving visual awareness and utilizing more effectively the talents of the staff, direction towards the related arts, community art involvement, defined primary program, resource people from the community, provision for an art major program in the senior high school with open studio in painting and sculpture and certain correlations with the industrial and homemaking arts.

The Art Curriculum Guide, dating from 1965, has been revised and Source, a series of five resource books prepared by the staff, has been updated.

Visual experiences are provided through audio-visual programming, field trips, visiting artists and craftsmen. An art department library has been established. Listings of available resource material are distributed frequently through the art department newsletter Art Memo. Monthly, as well as annually, exhibition is encouraged. Art clubs have been formed to encourage the talented intermediate. An Arts Centre at the Lycoming County Historical Museum Gallery has been established to offer weekday (after school) and Saturday morning activities in the arts.

The Williamsport Junior League conducts an appreciation of the arts program in the primary grades, the American Association of University Women sponsors the annual arts and crafts exhibit, the parent teacher association works through its cultural committees assisting the Community Arts Festival.

Additional Information:
School district: Williamsport Area School District
County: Lycoming
Grades: K-12, special education

Contact person: June E. Baskin
Supervisor of Art
Williamsport Area School District
605 W. Fourth St.
Williamsport, Pa. 17701

COMPUTER THEORY AND PROGRAMMING COURSE

When industry began to see the possibilities inherent in time-sharing of their computers, opportunities for enhancing or developing school instructional programs became readily apparent. Wissahickon Senior High School, located near the General Electric Missile and Space Division facility at Valley Forge, took advantage of the company's offer to cooperate with neighboring school districts on a time-sharing plan.

Wissahickon decided to institute a computer theory and programming course for interested students on an elective basis. The course, meeting five periods a week, carries one unit of credit in the mathematics program and is taught by an experienced mathematics teacher who has taken specialized instruction in computer work.

During the first semester, the course covers elements of mathematics including the binary system of numbers, matrix algebra, boolean algebra and probability, data processing, machine language, flow diagrams, programming pertaining to theory and operation and use of the computer.

With this background, the students move into practical exercises during the second semester. At this point, the computer itself enters the picture. Communication between the classroom and the General Electric computer is handled via a teletypewriter installed by Bell Telephone. Having learned how to use the teletypewriter and how to compose programs using the language of the computer, students type their problems on the teletypewriter, send the message to the computer and receive the answer in a matter of seconds. If the program is practical, it is "saved", that is, stored in the computer's library for future use. Programs have been written by students to solve problems in physics, chemistry and mathematics classes as well as problems of their own design. Intense interest has been generated among the students enrolled. Many would use the computer day and night if possible.

Additional Information:
School district: Wissahickon School District
County: Montgomery
Grades: 11-12
Pamphlet available upon request

Contact person: Albert B. Jacobs
Assistant for Secondary Instruction
Wissahickon School District
Ambler, Pa. 19002

HUMAN RELATIONS COMMITTEE

A new organization is functioning at Wissahickon Senior High School this year which is a joint student-faculty effort to provide better communication and understanding between students, staff and administration. The Human Relations Council, consisting of five faculty members and five students, was formed late in the last school year so that the membership would be ready to begin functioning early this year. The council will review problems of individuals or groups within the school and will be empowered to make recommendations to appropriate organizations who may be able to assist in eliminating or modifying the problem.

These organizations may include the student council, the faculty or the high school administration. By thus opening lines of communication, and by discussion situations which create friction, the council will attempt to recommend means of alleviating these situations before they become major problems.

Additional Information:
School district: Wissahickon School District
County: Montgomery
Grades: 10-12

Contact person: Albert B. Jacobs
Assistant for Secondary Instruction
Wissahickon School District
Ambler, Pa. 19002

LAY THEME READER PROGRAM

English teachers have long recognized that students need practice in writing to improve writing skills. Immediately following publication of Conant's The American High School Today, his suggestion that students write a theme a week was considered by the members of the English department. The decision to employ lay readers to assist with the program of written composition is based on two major premises:

1. An organized program of written composition, insuring regular planned writing assignments, is necessary if writing proficiency is sought.

2. English teachers need assistance in the important but time-consuming task of evaluating each student's writing in such a way that this writing becomes a meaningful learning experience.

Compositions, written as a part of this program, are treated as just one--but important--phase of the English program. Theme writing, along with other language arts' activities, comes under the general responsibility of regularly employed English teachers. The lay reader provides assistance to the English teacher in two ways:

1. Spending one period per week (for each section for which teacher grades papers) in the classroom working with the students in cooperation with the English teacher.

2. Reading and evaluating student themes according to the established system (usually done at home by the reader).

Under these circumstances, a cooperative relationship must be developed among teacher, reader and students if the program is to be effective.

The typical readers are college graduates, English majors, housewives, interested in working part time at their convenience. Recruitment has been no problem. Retention of capable readers has been good.

Additional Information:
School district: Wissahickon School District
County: Montgomery
Grades: 7-12
Pamphlet available upon request

Contact person: Albert B. Jacobs
Assistant for Secondary Instruction
Wissahickon School District
Ambler, Pa. 19002

MARKING SYSTEM RECOMMENDATIONS FOR NONHOMEWORK MINORS

A marking system which utilizes a grading system of good, satisfactory and unsatisfactory has been adapted for the following minor courses and for the physical education requirements.

The rationale is as follows:

1. Such a system eases the process of evaluation for the teacher by eliminating the need to draw fine lines of distinction since it is frequently difficult to draw these lines in a course which meets only two times per week.

2. It removes the grade competition aspect in areas where students are more frequently concerned with developing their own interests, rather than working for a grade. This makes the subject more interesting to the students and provides a relief from the competition for grades which exists in the major subjects.

3. Such a grading system is most appropriate for seminars, mini-courses and for some types of activities.

The grade equivalents are:

Good--A, B equivalent
Satisfactory--C, D equivalent
Unsatisfactory--F equivalent

The classification of good will meet National Honor Society and Distinguished Honor Roll standards. The classification of satisfactory will meet Honor Roll standards.

The following courses are affected:

Physical education
Metal working I and II
Wood working I, II and III
Home mechanics
Electricity I and II
Humanities
Dramatics
Choral methods
Choir
Art appreciation
Art I
Boys cooking
Lively arts
Band

Additional Information:
School district: Wissahickon School District
County: Montgomery
Grades: 10-12

Contact person: Albert B. Jacobs
Assistant for Secondary Instruction
Wissahickon School District
Ambler, Pa. 19002

MINI-COURSES

As a result of a questionnaire forwarded to students, a significant degree of interest was indicated in the area of mini-courses which would be offered after school for from no less than five to no more than 10 sessions, each approximately 45 minutes.

Such courses would be totally voluntary and would concern themselves with subjects of limited scope. A course may be suggested by a teacher or by a group of interested students. A transcript notation that the student had taken the course would be listed.

The purpose of such a program would be as follows:

1. To enable students to work in areas of interest without causing them to take an entire year of a subject.
2. To allow interested students to expand their interests and explore various areas to ascertain the depth of interest.
3. To build additional flexibility into the school program, making the school more responsive to student and community needs.
4. To allow the immediate pursuance of topics of current interest without having to go through the long process of curriculum change.
5. To permit the inclusion of interest courses at minimal cost and effect on the school program.

Successful mini-courses have included:

Cancer
Italian history
Film appreciation
Welding
Theatre of the absurd
Shakespearian seminar
Simulation games

Additional Information:
School district: Wissahickon School District
County: Montgomery
Grades: 7-12
Some course outlines available on request

Contact person: Albert B. Jacobs
Assistant for Secondary Instruction
Wissahickon School District
Ambler, Pa. 19002

PARENT-ASSIST

A parent-assist program, on a volunteer basis, was initiated during the spring of last school year at Mattison Avenue School. The purpose of this program was to provide help to the classroom teacher in reinforcing skills and working with students on a one-to-one basis in developing self-confidence and a better self-image. Evaluating the initial effort, the following benefits were noted by the classroom teachers:

1. The withdrawn children became more outgoing in their everyday activities.
2. Teachers noticed children trying harder in reading.
3. Children had more confidence in their reading ability.
4. A more friendly attitude was exhibited by the children when working with their peer groups.
5. Additional reinforcement of specific skills helps the child in improving those skills.
6. This effort enabled the teachers to provide more intensified instruction to individuals needing help.

The school board approved the expansion and continuance of this program this summer. The first step in this program was to have teachers in grades 1, 2 and 3 identify children they felt would benefit from this type of individualized help. Of the 57 children who were recommended for the program, 46 of the parents contacted wanted their children included in the program.

Recruiting parents to participate in this program was facilitated through the Mattison-Forest Avenue parent teachers association newsletter and public announcements during the PTA meetings as well as recommendations from teachers. Ten parents responded that they would be interested in working in this program. Three orientation meetings were held prior to the beginning of this program which officially started the last week in November.

The parents' activity is programmed by the classroom teacher with supportive help from the reading specialist and the principal. Through personal contact with the teacher prior to the scheduled time, or a prescription sheet, the parent is informed of the specific skill or activity the teacher wishes them to reinforce. At the conclusion of the period, the parent notes what has been accomplished during the time and turns the information over to the teacher for further evaluation and follow-up work. A continual in-service program is provided by scheduling a weekly meeting. This is in addition to the continual dialogue the parents have with the teachers.

Additional Information:

School district: Wissahickon School District
County: Montgomery
Grades: K-3

Contact person: Albert B. Jacobs
Assistant for Secondary Instruction
Wissahickon School District
Ambler, Pa. 19002

SCHOOL DISTRICT SPONSORED RECREATION

During the 1968-69 school year, the school district began sponsorship of school district youth recreation programs in the two junior high schools and the senior high school. These programs run for two hours each Saturday and are for all school district youth in the age range appropriate to the school center. The students are involved in activities such as basketball, volleyball, gymnastics, ping pong and other activities according to season. Average attendance at each of the junior high centers is 50-60 students per session; at the senior high school--30 per session.

At the beginning of the 1969-70 school year, the district expanded the program to involve community adults. This program is offered Monday evenings and involves activities similar to those described above. About 40 adults attend each session.

In 1970-71 school year, a Friday night recreation program for school district youth, grades 7-12, was instituted. This program is held in the most central of the junior high schools. In addition to the activities indicated above, occasional dances and movies are included in the program. The average attendance for this session is 110 students.

These programs are open to all district residents of the appropriate age range, regardless of school affiliation. All sessions are supervised by members of the professional teaching staff on an hourly pay basis.

Additional Information:
School district: Wissahickon School District
County: Montgomery
Grades: 6-12

Contact person: Albert B. Jacobs
Assistant for Secondary Instruction
Wissahickon School District
Ambler, Pa. 19002

SIXTH GRADE TYPING PROGRAM

During the 1969-70 school year, a pilot program in typing instruction to 6th grade students was conducted at Wissahickon Senior High School. As a result of this experience, the middle range of accomplished typing speed was 26 words per minute. It was also observed that students became more attentive to neatness, grammar, spelling and sentence structure as well as gaining a skill which will be of continued value to them as they continue through school.

The purpose of the experimental project was to determine the worthwhileness of typing instruction for 6th grade students. Educational research indicates that upper elementary school students are capable of learning to type. School district educators wanted to determine the degree of interest, physical ability and emotional maturity of the students. With this information, teachers could decide whether or not typing instruction would be beneficial to upper elementary school pupils of Wissahickon School District.

Observations of the students participating in the pilot study indicated that 6th grade students are interested and capable of learning to use a typewriter. After nine weeks of instruction, over 70 per cent of the 6th graders could type at the rate of 20 or more words per minute. Also observed was an improvement in some of the students' attitudes toward other school work, such as reading. At first, pupils had difficulty pushing the keys with their little fingers and reaching the number keys. By the end of the course, most students had developed enough finger strength to enable them to type satisfactorily.

As a result of this experience, the program has been expanded to include all four of the 6th grades at Lower Gwynedd School, each of which will receive a nine-week course at Wissahickon.

Additional Information:
School district: Wissahickon School District
County: Montgomery
Grade: 6
Report synopsis available

Contact person: Albert B. Jacobs
Assistant for Secondary Instruction
Wissahickon School District
Ambler, Pa. 19002

SPECIAL EDUCATION WORK STUDY

The work experience program for special class students is entering its third year this year. Beginning with the 10th grade year, the students' program emphasizes work habits development, both in the special class studies and in the "regular" courses which these students take. Among the work experience preparation projects are the completion of practice applications from local business and practice interviews recorded on tape and listened to for errors.

Studies in 11th and 12th grades are eligible for part-time out-of-school training on actual job sites. Whether students receive out-of-school training experience is based upon the teacher's judgment of their readiness for such work. All work experience cooperative employers work in close coordination with the special class work experience coordinator. Feedback reports are given to the coordinator who reviews these with the students. Work experience students spend one-half of their day in the school and review and discuss on-the-job experiences during that time.

Presently one senior boy is working as a carpenter's helper, one junior boy is working at a manufacturing company. An 11th grade girl is employed at a candies manufacturing company.

The success of the program can be judged by the fact that all but one of the special class graduates of the past two years are gainfully employed.

Employers who have worked with this program have been generally enthusiastic about the quality of work performed by the students. These employers include rest centers and nursing homes, manufacturing concerns, contractors, service stations, public libraries and department stores.

We believe that "the most important phase of the program is the development of work and social habits. Those who work in the field of special education have discovered through experience and research that employable special education people lose jobs, not because they are unable to learn a skill but because of unacceptable work and social habits."

Additional Information:
School district: Wissahickon School District
County: Montgomery
Grades: 11-12

Contact person: Albert B. Jacobs
Assistant for Secondary Instruction
Wissahickon School District
Ambler, Pa. 19002

STUDENTS IN GOVERNMENT

One of the charges facing social studies teachers today is the need for relevancy, bridging the gap between classroom theory and the living laboratory of the community. At Wissahickon Senior High School, students in the government program present municipal government in a realistic manner. Features of the program include (1) school-community cooperation involving the student body, the social studies department, the high school administrative staff, the Ambler Kiwanis Club and three municipal government bodies; (2) opportunity for participation by all students commensurate with their interests and abilities and (3) opportunity for depth participation by those students who assume leadership roles.

Wissahickon serves students from three local areas in Montgomery County--Ambler Borough, Whitpain Township and Lower Gwynedd Township. Students elect student officials to fill corresponding offices in the respective municipal governments.

The entire election process is traced from beginning to end, i.e., from registration to on-the-job local government experience. Registration divides the classes into democrat, republican and nonpartisan. Party members hold caucuses to select candidates to run for local offices. Information is conveyed to the student body through a kick-off assembly, the social studies classes and a "rally day" assembly. Campaigning then begins. A board, composed of students and teachers, oversees the entire process. On election day, all registered students are permitted to vote using voting machines. Successful candidates for elective offices are then responsible for appointing nonelective officials. Student officials then begin a series of committee meetings with actual municipal officials. Culminating activities include participation by student officials in a public meeting and in an honorary dinner sponsored by the local Kiwanis Club.

A recent addition to the program has been the election of administrative officers for the high school.

Additional Information:
School district: Wissahickon School District
County: Montgomery
Grades: 10-12
Pamphlet available upon request

Contact person: Albert B. Jacobs
Assistant for Secondary Instruction
Wissahickon School District
Ambler, Pa. 19002

TEAM-CORE

The situation that led this district to institute this program was the need for a new building--one which could be constructed to accommodate a flexible program. This presented the opportunity to reevaluate the 7th and 8th grade programs and devise all the changes necessary to benefit the entire student body. The aims of the program were very broad and mainly organizational. A scheme was needed which would make better use of teacher time, promote learning as a whole rather than in isolated segments and provide personal guidance at a critical stage in the child's life. A wider and more effective use of audio-visual equipment was also desired.

The program was introduced to the 7th grade while it was housed in a building apart from the 8th grade. Staff planning by the 8th grade teachers, orientation meetings, staff team meetings and public orientation meetings were held prior to the start of the program in the new school. This team-core program consists of large and small group instruction when desirable, an effort to show a relationship or correlation of subject areas, all enhanced by use of closed circuit television. Teacher time has been used more efficiently as a result. Guidance centered team meetings held twice weekly permit the counselors and teachers to work closely with the individual students. A key to the program is the constant search for ways to correlate subject areas. This is done through the provision for common planning time and the use of building planning areas.

Additional Information:
School district: York Suburban School District
County: York
Grades: 7-8

Contact person: Stanley P. Houser
York Suburban School District
Sundale Drive
York, Pa. 17402

INDEX/MATRIX

The abstracts are arranged in alphabetical order according to school district name and, within a district, by program title. The index/matrix then lists abstract pages by descriptors--subject areas or other topics--which can be cross-referenced by grade level(s).

Level Descriptor	Pre-K Kindergarten	Elementary K-3 1-3 K-6 4-6, etc.	Middle 6-8 5-7 5-8	Junior high 7-8 7-9	High 9-12 10-12 9-10 11-12, etc.	Adult Other
Able students		27,31,205		162,234	24,63,140, 162,234	
Advanced placement programs					226,233	
Advanced programs					14,63,92,108, 272,277	
Aerospace technology					4,212,257	
Agricultural education		111			143,159,213, 269	159
American history					15,103,226	
Anatomy					14	
Art		26,132,290		26,161,214, 290	13,14,26,161, 214,290	
Art appreciation		290		161,214, 290	13,161,214, 290	
Astronomy		156		156	273	
Audio-visual centers		60,225,281		60,225	60,121,225	
Basic skills		95,106,240, 270		106,240, 270	106,118,240, 270	232
Behavioral objectives		95		162	77,162,163	
Bilingual education	74,88	74,88,217		74,88,217	74,88,217	88
Biological sciences				162	92,147,162, 164,280	
Braille		288		288	288	
Business subjects					67,93,109, 120,138,215	120
Cartoons					71	
Chemistry instruction					77,163,164, 272	
Clinics	100	35,100		35,100	100	
Community recreational programs		297	58	297	297	297
Compensatory education programs	43,74,82, 100,219, 229,235	15,26,48,49, 61,74,82,100, 114,194,195, 208,219,229, 235,248,260, 262		10,26,48, 49,74,100, 194,208, 229,260	26,48,49,74, 100,208	

Level Descriptor	Pre-K Kindergarten	Elementary K-3 1-3 K-6 4-6, etc.	Middle 6-8 5-7 5-8	Junior high 7-8 7-9	High 9-12 10-12 9-10 11-12, etc.	Adult Other
Composition skills (literary)				293	193,276,293	
Computer assisted instruction		168,218			86,228	
Computer science education				206	120,180,206, 239,265,291	120,265
Consumer education			211		70,181,211	
Continuation education					19	
Continuous progress plan		123,145,167, 170				
Creative expression		27,72,132		72	72,183	
Current events					7,68,71,73	
Day care programs	219,229	219,229				
Developmental guidance		2,6,9,34,205, 208		2,208	2,208	
Developmental reading		96,204		66,117, 190		
Diagnostic teaching		35,107		35		
Distributive education					45,198	
Drafting					16,46,192, 201	
Driver education					150,174,216	216
Drug education		8,137			116	
Ecology		61,106,111, 250,267		106,149, 250,267, 275	106,136,250, 267,275	250
Elective subjects -use short courses						
Electricity, electronics					16,46,285	
English instruction					41,64,80,165, 182,193,196, 276	

Descriptor / Level	Pre-K Kindergarten	Elementary K-3 1-3 K-6 4-6, etc.	Middle 6-8 5-7 5-8	Junior high 7-8 7-9	High 9-12 10-12 9-10 11-12, etc.	Adult Other
English (second language)	74	48,49,74,217		10,48,49,74,217	48,49,74,217	
Enrichment programs		274		59,234,274	234,274	
Family life education		2,8		2	2,116	
Fine arts		132		234	234	
FLES programs		130				
French		52,130,287		52,287	52,287	
Geography instruction				245		
Gifted--see able students						
Grading		95,129			3,29,80,186,294	
Graphic arts					16,46,67	
Grouping (instructional purposes)		21,96,185,187,191,203,207	58,153	190,191	69,191	
Guidance services	100	9,15,34,100,114,244,262		100,199,244	19,100,199,244	
Hebrew				12		
High-interest, low vocabulary books					177	
Home economics education			211		40,94,211	
Humanities instruction		191		191	3,15,99,183,191,253,284	
Human relations units					292	
Independent study		205			3,63,77,80,121,140,164,184	
Individualized instruction		36,37,38,135,170,210,222,236,241	58,171,173,175,210	20,66,117,236	109,175,210,236	

Level Descriptor	Pre-K Kindergarten	Elementary K-3 1-3 K-6 4-6, etc.	Middle 6-8 5-7 5-8	Junior high 7-8 7-9	High 9-12 10-12 9-10 11-12, etc.	Adult Other
Industrial arts			46,57,242	16,46,197, 246	46,127,192, 197,201,257, 285	
Industrial education			57,242	16,39,110	4,16	
Information services						179
Initial teaching alphabet		50				
In-service programs	82	9,82,104,119, 225		225	225	18,200
Instructional materials centers		60,134,281		60,121		
Intercultural programs		155		10,245	5,68,98,99, 139,158,183, 188,247	
Interdisciplinary approach		51,191,249	153,211	51,191,249, 301	15,51,99,191, 211,249	
Internship programs					78,300	
Job skills					40	
Landscaping					136,143	
Language arts		21,91,125, 170,241	171	22	101	
Languages		52,154,287		10,12,52, 56,154,287	52,156,154, 233,287	56
Large group instruction			57,58		158,174	
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Learning disabilities		30,204,251, 252				
Learning processes		44,91,119, 155,256		20	76,77,101	
Linguistics		33,47,231		22,231	101,231	
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Mathematics instruction		21,36,207, 237,241	175		86,142,175, 228,277,291	

Level Descriptor	Pre-K Kindergarten	Elementary K-3 1-3 K-6 4-5, etc.	Middle 6-8 5-7 5-8	Junior high 7-8 7-9	High 9-12 10-12 9-10 11-12, etc.	Adult Other
Mental health programs		2,137		2	2	
Mini-courses--use short courses						
Minimally brain-damaged		251				
Mobile educational services		35,96,268	96	35,268		
Multi-media instruction		72,222,237, 274	57,58,175	66,72,112, 274	23,72,142, 175,259,274	
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Nongraded classes	82	82,129,145, 203			65,182	
Nongraded primary system		95,185				
Occupational guidance				62,83,199	62,83,118, 127,143,159, 199,264	159
Outdoor education		250		149,250	136,250	250
Parent participation	82,219	15,28,48,82, 134,194,219, 296	58	48,194	48	
Perceptual motor learning		261				
Physical education		49,75,166, 279		49,279	49,279	
Physical handicaps		279		279	279	
Physics instruction					4,25,63,108, 164	
Planetariums		156		156		
Power mechanics					4	
Prefirst--use transitional classes						

Level Descriptor	Pre-K Kindergarten	Elementary K-3 1-3 K-6 4-6, etc.	Middle 6-8 5-7 5-8	Junior high 7-8 7-9	High 9-12 10-12 9-10 11-12, etc.	Adult Other
Preschool programs	15,43,82, 219,229, 235	235				
Program development		51,223		51	51	
Psychology					76	
Public affairs education					7,73,78,300	
Race relations					103	
Reading improvement		15,35,53,100, 114, 125,268,283		35,59,66, 100,112,113, 268	54,100,177	
Reading instruction		33,37,37,50, 55,91,95,96, 241				
Religious literature					5,98,139, 282	
Remedial reading programs		96,128,208, 248,260	96	66,208,260	208	
Resident camp programs		61,267				
Resource teachers		53,125,126				
Russian		154		154	154	
Safety education		150		150	150	
School organization		60,84	58,148	60,209	60,69,209	
School orientation	82	82		178		
Science instruction		38,44,51,119, 156,256		20,51,156, 162	51,147,162, 164,212	
Screening tests		151,152,195			196	
Short courses					23,24,29,41, 42,64,65,157, 165,182,186, 193,196,294, 295	
Simulation and games		218		110		
Social adjustment		2,6,8,9,34, 133,137,195		2,10,62, 178	2,62,70,76, 116,118, 127,221	
Social studies		155,249	173	131,249	7,29,42,157, 249	

Level Descriptor	Pre-K Kindergarten	Elementary K-3 1-3 K-6 4-6, etc.	Middle 6-8 5-7 5-8	Junior 7-8 7-9	High 9-12 10-12 9-10 11-12, etc.	Adult Other
Spanish					56	56
Special education		83,102,107, 251,252		62,83,102	62,83,102, 278,289,299	
Speech education					286	
Speech therapy		28				
Staff improvement		223				
Student seminars					3,7,81	
Summer programs	88	26,28,88,208, 240,262		26,88,208, 240	26,88,208, 240	88
Survival learnings		122		122	122	
Swimming		75				
Talented students				227	227	
Teacher education						18,224
Team teaching		145,187	57,58,153	190,301		
Theater arts					26	
Transition classes		30,104,152				
Tutorial programs		31,105,133, 283,296		105	105	224
Typewriting		298				
Underachievers		104,105,205, 251,252,254		105	105	
Unwed mothers					19	
Visual perception		261				
Visually handicapped		102,288		102,288	102,288	
Vocational agriculture					143,159,213, 269	159
Work experience programs				62	62,83,93,127, 138,198,264, 270,278,289, 299	